

**REPORT
OF
THE EXPERT COMMITTEE
ON
TAX MEASURES TO PROMOTE EMPLOYMENT**

JANUAR . 1980



**MINISTRY OF FINANCE
DEPARTMENT OF REVENUE**

ERRATA

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77	6.4	17	<u>pari pasu</u>	<u>pari passu</u>
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CHAPTER I

INTRODUCTION

1.1 In his Budget Speech for 1979-80 in the Lok Sabha the then Deputy Prime Minister and Minister of Finance had announced the Government's intention to appoint an expert committee of economists and tax administrators to study the impact of tax concessions on the techniques of production used in industry and make recommendations for reform in order to encourage the adoption of labour-intensive methods and enlarge opportunities for employment.

1.2 This Committee was accordingly constituted by the Government of India in May, 1979 with the following terms of reference:

- (i) to identify provisions in Central tax laws which have an influence on the employment of labour in the economy;
- (ii) to examine the impact of these provisions on employment and the techniques of production in industry, agriculture and other areas of economic activity;
- (iii) to suggest appropriate changes in Central tax laws so as to promote employment and adoption of labour-intensive methods of production having due regard to administrative feasibility and other objectives of public policy such as economic growth and self-reliance; and
- (iv) to make recommendations regarding any other related matter.

1.3 The composition of the Committee as originally constituted was as follows:

Prof. V. M. Dandekar, Director, Gokhale Institute of Politics and Economics, <u>Pune.</u>	...	Chairman
Dr. A. Vaidyanathan, RBI Fellow, Centre for Development Studies <u>Trivandrum.</u>	...	Member
Dr. Anand P. Gupta, Professor of Economics, Indian Institute of Management, <u>Ahmedabad.</u>	...	Member
Shri L. C. Jain, Chairman, All India Handicrafts Board, <u>New Delhi.</u>	...	Member

Shri K. Narasimhan,
Special Secretary,
Department of Revenue,
Ministry of Finance.

... Member

Dr. A. Bagchi,
Director,
Ministry of Finance,
Department of Economic Affairs.

... Member-Secretary

Subsequently, Shri I. P. Gupta, Member, Central Board of Direct Taxes, was appointed whole-time Member of the Committee. The relevant resolutions of the Government are reproduced in Appendices I and II to this chapter.

1.4 The Committee was directed to submit its report by the 30th September, 1979. The tenure of the Committee was later extended upto the 31st December, 1979 in the first instance and thereafter upto the 31st January, 1980.

1.5 Soon after the Committee was constituted, a press note was issued inviting views from the public on the issues bearing on the subjects referred to the Committee. Subsequently, an advertisement also was inserted in the newspapers setting out the composition and terms of reference of the Committee and inviting views and suggestions. In response, memoranda and representations were received from a number of individuals, organisations, trade associations and chambers of commerce.

1.6 The Committee held ten meetings, some of which were held at Bombay, Calcutta and Madras. During the course of these meetings the Committee met the representatives of labour, trade associations, chambers of commerce, some eminent persons and officials, and had the benefit of their views.

1.7 The committee wishes to thank all those individuals, trade associations, chambers of commerce and officials who took keen interest in the work of the Committee and sent their views or appeared in person before the Committee. The Committee benefited greatly from their knowledge and expertise.

1.8 The Committee is indebted to a number of government departments and agencies for assistance in various forms. The Department of Revenue, especially the Central Board of Direct Taxes and the Central Board of Excise and Customs, and the Economic Division of the Department of Economic Affairs rendered all help and cooperation required by the Committee. The Committee wishes to thank the Commissioners of Income-tax and the Collectors of Central Excise and Customs for help in collection of data required for its work and providing other facilities. The Collector of Central Excise, Madurai, deserves special thanks for the pains taken by him to provide information for the study of match industry and facilitate the visit to Sivakasi and adjoining areas by some of the members of the Committee in that connection. The Committee received very valuable help from the Textile Commissioner, Development Commissioner (Handlooms), Planning Commission, Department of Statistics of the Reserve Bank of India, National Small Industries Corporation, State Bank of India at Ahmedabad and Calcutta, Industrial Development Bank of India and the

Institute of Applied Manpower Research. The Committee is indebted to Gokhale Institute of Politics & Economics, Pune, and the Indian Institute of Management, Ahmedabad, for undertaking studies on behalf of the Committee and for providing secretarial and other facilities. The Committee wishes to thank the Government of Tamil Nadu for the courtesy extended during its visit to Madras.

1.9 The Committee wishes to express its appreciation of the work done by Shri Daya Sagar (retired Collector of Central Excise) who acted as a consultant. His experience and expertise in the field of Central Excise were an asset to the Committee. The Committee would also like to thank Shri Lajja Ram and Shri Bhardwaj, Deputy Directors of Inspection, Central Excise Department, for preparing very useful notes and papers for the Committee. Valuable contribution was also made by Shri K.K. Bajaj, Assistant Director of Inspection (Income-tax) Shri T.S. Rangamannar, Senior Research Officer, Department of Economic Affairs, Kum. G.M.Rao, Research Officer, Planning Commission, Shri K.N. Ravindran, Examiner, Custom House, Cochin, and Kum. Mala Iyer and Shri T. Prabhakaran of the Indian Institute of Management, Ahmedabad.

1.10 The Committee wishes to record its appreciation of the dedicated work done by its secretariat. Though small in size, the secretariat handled a large volume of work with great care and speed. Shri M.L. Ohri, Senior Research Officer, deserves a special mention for the very able and painstaking work done by him. S/Shri I.S. Parihar and P. Swaminathan, Economic Investigators, Shri P.V. Ramachandran, Assistant in the Department of Economic Affairs, Kum. Bharti Shah, Income-tax Inspector, Bombay, and Shri Nagwanee, who acted as a part-time Section Officer, also rendered very valuable services. The Committee is grateful to all of them. S/Shri S. Bhaskaran and V. Mithran, deserve commendation for neat and accurate typing of the Committee's report and background papers. The Committee is also thankful to the other members of the staff for the work done by them.

APPENDIX I

MINISTRY OF FINANCE (Department of Revenue)

RESOLUTION

New Delhi, the 30th May, 1979

Subject: Appointment of an Expert Committee to study the impact of Central Tax laws on techniques of production and make recommendations for reform to enlarge employment opportunities.

F.No.A-12026/26/79-Ad.I(Cen). - The Deputy Prime Minister and Finance Minister in his Budget speech in the Lok Sabha on 28th February, 1979 had announced the Government's intention to appoint an expert committee of economists and tax administrators to study the impact of tax concessions on the techniques of production used in industry and make recommendations for reform in order to encourage the adoption of labour-intensive methods and enlarge opportunities for employment. The Government have now decided to appoint an expert committee for this purpose which will consist of:

Chairman:

Prof. V.M. Dandekar,
Director,
Gokhale Institute of Politics & Economics,
Pune.

Members:

1. Dr. A.Vaidyanathan,
RBI Fellow,
Centre for Development Studies,
Trivandrum.
2. Dr. Anand P.Gupta,
Professor of Economics,
Indian Institute of Management,
Ahmedabad.
3. Shri L.C. Jain,
Chairman,
All India Handicrafts Board.
4. Shri K.Narasimhan,
Special Secretary,
Department of Revenue,
Ministry of Finance.

2. A senior officer of the Department of Revenue from the direct taxes side will also be nominated to the Committee.

3. Dr. A. Bagchi, at present Director in the Fiscal Policy Section of the Department of Economic Affairs, Ministry of Finance, will be the Member-Secretary.

4. The Committee will have the following terms of reference.

- (i) To identify provisions in Central tax laws which have an influence on the employment of labour in the economy;
- (ii) to examine the impact of these provisions on employment and the techniques of production in industry, agriculture and other areas of economic activity;
- (iii) to suggest appropriate changes in Central tax laws so as to promote employment and adoption of labour-intensive methods of production having due regard to administrative feasibility and other objectives of public policy such as economic growth and self-reliance; and
- (iv) to make recommendations regarding any other related matter.

5. The Committee will evolve its own procedures for its work. The Department of Revenue will provide the Secretariat to the Committee.

6. The Committee will make its recommendations to the Government of India by 30th September, 1979.

ORDER

Ordered that a copy of the Resolution be communicated to all concerned.

Ordered also that the Resolution be published in the Gazette for general information.

N.K. PANDA, Jt. Secy.

APPENDIX II

MINISTRY OF FINANCE (Department of Revenue) (Central Division)

RESOLUTION

New Delhi, the 18th June, 1979.

Subject:- Appointment of an Expert Committee to study the impact of Central tax laws on techniques of production and make recommendations for reform to enlarge employment opportunities.

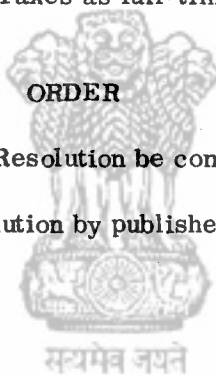
F. No. A.12026/16/79-Ad. I(Cen.) - In the Ministry of Finance, Department of Revenue, Resolution of even number, dated the 30th May, 1979, it was mentioned that a senior officer of the Department of Revenue from the direct taxes side will be nominated to the Committee. It has since been decided to appoint Shri I. P. Gupta, Member, Central Board of Direct Taxes as full-time Member of the Expert Committee.

ORDER

Ordered that a copy of the Resolution be communicated to all concerned.

Ordered also that the Resolution be published in the Gazette for general information.

N.K. PANDA, Jt. Secy.



CHAPTER II

THE CONTEXT

2.1 The context of the appointment of our Committee is the employment situation in the country as it has developed over the past half a century. The Draft Sixth Five Year Plan 1978-83 Revised (hereinafter Revised Draft Plan 1978-83) describes it as follows: "A look at the distribution of workers in India in seven decennial Censuses 1911-1971 shows up the historically unique fact that in spite of an impressive development of the large-scale manufacturing and infrastructure sectors, the share of agriculture in the work force has not diminished at all. It was 72 per cent in 1911, 73 per cent in 1961 and nearly 74 per cent in 1971.... a fairly rapid growth in the non-agricultural sectors during the last twentyfive years of planned development has not made any noticeable impact on the industrial distribution of the work force. For six decades, the share of mining and manufacturing in the work force has stuck around 9 to 10 per cent and that of the tertiary sectors around 16 to 18 per cent. The inference is clear: employment growth in these sectors has been insufficient to absorb an increasing proportion of the labour force. Investment and output have grown at a high rate but the production-mix and the technology mix have been so capital-intensive that employment has not grown *pari passu*. Between 1961 and 1976, for example, in the modern factory sector, investment increased 139 per cent and output 161 per cent but employment increased only 71 per cent. Therefore, employment per unit of gross output decreased by 34 per cent and employment per unit of capital declined by 28 per cent." (para 10.16) A study of the relationship between employment and output over the period 1960-75 at the industry level is presented in the Appendix to this chapter.

2.2 Employment in the agricultural sector and the non-agricultural sector is one distinction to make in a discussion of the employment situation. Another distinction is between the employment in the organised sector and the unorganised sector. Broadly speaking, the organised sector comprises all public sector units and all private sector units with ten or more workers. Because a large part of employment in this sector is regularly recorded, the Planning Commission chooses that as the criterion and distinguishes the recorded employment from the rest. In Table 2.1, we present the relevant data from the Revised Draft Plan 1978-83.

Table 2.1
Recorded Employment by Industry Divisions
(In thousand)

Industry Division (1)	Year (March, 31)	
	1967-68 (2)	1977-78 (3)
1. Agriculture and Allied Activities	1188	1680*
2. Mining and quarrying	739	976*
3. Manufacturing	4716	6961*
4. Electricity, Gas and Water	373	649*
5. Construction	902	1076
6. Wholesale and Retail Trade	2508	3944*
7. Transport and Communications	2408	2938
8. Services	6117	8267
9. Total	18951	26491

Projected

Source: Draft Sixth Five Year Plan 1978-83 Revised (Chapter 10, Annexure 13)

2.3 It will be seen that between 1967-68 and 1977-78 recorded employment increased from 19 million to 26.5 million at the rate of about 0.7 to 0.8 million annually on the average. The annual increase in the labour force in recent years has been of the order of 6.5 million. Thus recorded employment accounted for only about 12 per cent of the estimated annual increase in the labour force. The remaining 88 per cent have to depend, for their livelihood, either on agriculture or some small unit activity.

2.4 Projecting the employment situation to 1983, on the assumption that the present trends will continue, the Revised Draft Plan 1978-83 notes: "Looking ahead, the labour force is likely to increase again by 33.5 million over the 5-year period 1978-83. If the rate of industrial growth remains around 5 per cent per annum, recorded employment which is highly correlated with industrial production, may rise by another 5 million over the five-year period 1978-83. If the rate of industrial growth rises to 7 per cent per annum, the increase in employment in the organised sector may be a little less than 7.5 million over the five-year period. In either case the unorganised agricultural and non-agricultural sectors will have to absorb the remaining 26 to 28 million." (para 10.25) As this additional 33.5 million persons will be seeking work besides the existing pool of unemployment estimated at 19.5 million person-years, and the organised sector cannot absorb more than 7 million persons out of the total number of person-years which may seek work (53 million), remunerative employment will need to be created for 46 million person-years outside the organised sector.

2.5 In view of the above trends and the limited capacity of the organised sector to absorb the growing labour force, the major thrust of the employment policy suggested in the Revised Draft Plan 1978-83 is "to increase income and employment in agriculture and allied activities and also in small scale manufacturing and services. The approach would be to make the pattern of production as labour intensive as possible. Technological changes would be sought to be so regulated that the growth of employment is facilitated.") (para 10.29) Drawing attention to the fact that even if the postulated rate of growth of industrial production (7 per cent) is realised during 1978-83, recorded non-agricultural employment will absorb less than one-fifth of the increase in the labour force and its share in the total working population will go up only marginally from about 10 per cent to about 11 per cent, the Revised Draft Plan 1978-83 concludes that, "the key element of the strategy to reduce the unemployment problem will have to be to increase income and employment in agriculture and allied activities and in small-scale manufacturing and services." (para 10.31)

2.6 Measures proposed for implementing the above strategy are: (i) re-shaping of Government investments and expenditures so as to increase labour absorption such as through larger spending on infrastructure services like road construction, water supply and social services like health and education, (ii) influencing private demand so that larger purchasing power can be generated among the poverty groups (e. g. through irrigation programmes and land reform) and (iii) promotion of appropriate techniques which increase productivity without excessive labour displacement in rural and small-scale urban activities. (paras 10.33 to 10.39 of Revised Draft Plan 1978-83).

2.7 Measures proposed in the Revised Draft Plan 1978-83 for promotion of appropriate technology are based on the consideration that the consumer goods sector should record an employment growth which is no less than the rate of growth of its output.

In the absence of any technological change, employment in the sector would grow at the same rate as output. But if greater labour absorption is desired, employment should grow at a faster rate than output. In view of the need to save capital which is in short supply, for allocating new capacity in a problem sector, an additional criterion specified is that the investment required should be allocated between the investment required for creating new capacity embodying the most capital-intensive technique and that required for the least capital-intensive technique. "With these two policy assumptions", it is stated, "if programming is used to minimise the cost of producing the target output, the allocation of new capacity can be objectively determined. A policy of reservation or differential excise-protection is likely to raise the product price for the consumer to a small extent but if the gain in employment and saving of capital is sufficiently large, the policy of protection may be considered justified. In some cases, such as khandasari sugar industry, it appears that successful technological research, focussed on particular aspects of existing small-scale technology, can eliminate its cost disadvantage altogether and it may then not need any protection. In other cases, if some protection is considered necessary, the two policy instruments available for providing it are: (1) reservation, and (2) differential excise taxation." (para 10.42 to 10.44 of Revised Draft Plan 1978-83)

2.8 The employment situation as it has developed over the past half a century and to which the Draft Five Year Plan 1978-83 has invited attention so sharply was not altogether unanticipated. Indeed, the apprehension that the growth of modern industrial sector and related infrastructure might not be able to absorb the growing labour force in the country has been expressed and a conscious and deliberate choice of appropriate technology or technology-mix has been advocated and emphasised in every plan beginning with the First Five Year Plan. The First Plan recognized the employment aspect of the village industry and emphasized the need to protect it from the competition of large-scale industry. More specifically, it was suggested, that, whenever a modern large-scale industry competed with and threatened the existence of a village industry, the appropriate method of protecting the village industry was to formulate a common production programme the principal elements of which were to be (a) reservation of spheres of production, (b) non-expansion of capacity of the large-scale industry, (c) imposition of a cess on the large-scale industry, (d) arrangement for supply of raw materials and (e) co-ordination of research, training, etc.

2.9 During the period of the First Five Year Plan, a number of steps were taken along these lines. For instance, in April 1950, the cotton mill industry was prohibited from producing certain varieties of cloth; the production of these varieties was reserved for the handloom industry. In December 1952, the mills were directed not to produce certain varieties of cloth in quantities more than 60 per cent of the production during the previous year. Besides, an additional excise duty was levied on the production of certain varieties of cloth by large mills in excess of 60 per cent of their production during 1951-52. Under the Khadi and Handloom Industries Development (Additional Excise Duty on Cloth) Act, 1952, assistance was provided to khadi and handloom industries out of a special cess levied on mill cloth.

2.10 In order to promote village tanning and leather goods industry, no new schemes for the expansion of capacity of either large tanneries or leather footwear factories were sanctioned. In the case of a number of other traditional industries, such as oil

pressing and hand-pounding of rice, it was recognised that the principal problem was the extremely inefficient equipment that was used in these industries. The immediate programme for these industries, therefore, was to replace the traditional equipment with improved designs. In addition to supporting the traditional industries by such measures, efforts were also made to establish new industries with labour intensive technology such as, for instance, handmade paper, soap based on non-edible oils, and cottage match industry. Thus, during the First Plan period, though a common production programme was not prepared or adopted for any single industry, a number of steps were taken in relation to several of the elements of such a programme.

2.11 The village industries received a more crucial and strategic place in the Second Five Year Plan. This was an immediate consequence of the principal objective of the plan, namely, "to develop basic and heavy industries for the manufacture of producer goods and thus to strengthen the foundation of economic independence." This required allocation of a major part of the total investment to basic and heavy industries and comparatively little was left for the development of consumer goods industries. Therefore, increased production of consumer goods had to be sought through the existing industrial structure which in large part was of the traditional vintage. This was the principal ground for preferring the village industries for the purpose of meeting the demand for consumer goods. Nevertheless, the employment aspect of these industries, namely that they provided greater employment, was also noted. In fact, impressed by this aspect, another major objective of the plan was "to liquidate unemployment as quickly as possible and within a period not exceeding ten years." The Panel of Economists set up to advise the Government in the formulation of the Second Plan explained the policy as follows: "As we have already pointed out, every attempt should be made to bring about the fullest possible utilisation of existing capacity in the factory consumption goods industries: but we do not contemplate, for the Second Plan period at any rate, any significant increase in their installed capacity. This is not only because we want to concentrate our scarce resources of foreign exchange and essential materials on the setting up and expansion of the heavy industries and economic overheads; but also because we want to provide more employment opportunities for those who are already engaged in the small-scale and cottage industries and find employment for the new additions that are being made to the labour force every year. Hence the emphasis on small-scale and cottage industries in the Second Plan." (Memorandum of the Panel of Economists in Papers Relating to the Formulation of the Second Five Year Plan pp. 10-12)

2.12 In pursuance of this policy, the Government appointed a committee (Village and Small Industries Committee) to prepare a scheme with the following objectives: (1) that the bulk of the increased production of consumer goods in common demand has to be provided by the village and small-scale industries; (2) that the employment provided by these industries should progressively increase, and (3) that production and marketing in these industries is organized, in the main, on cooperative lines. The Committee made it clear that it was not opposed to improved technology as such. It justified the first objective on grounds that, in the course of economic development, it was necessary to avoid technological unemployment or under-employment and recommended that in those spheres where the adoption of new techniques was likely to cause unemployment of both existing capital equipment and labour, the pace of adoption of new techniques should be deliberately regulated.

This was also justified on grounds of optimum use of scarce resources. The Committee observed: "One of the main shortages which is experienced in planning for economic development in India is shortage of capital. Next to this is the shortage of trained personnel. Therefore, if existing investment and personnel can produce required results fairly efficiently, it might be wiser for the next stage of development to utilise them fully than to utilise scarce resources of capital in creating substitutes for them." (Planning Commission, Report of the Village and Small Scale Industries — Second Five Year Plan — Committee, pp. 14—20).

2.13 The second objective, namely, that of providing progressively increasing employment in village and small-scale industries, was justified on grounds of need to give relief to the unemployed. The Committee observed: "The existence of a large volume of unemployment and underemployment creates a very serious situation in the country Granted that the economic and administrative resources of government in the country are extremely inadequate for any system of relief on social security which would take care of this large problem, it follows that the relief to this large class must be given chiefly through providing additional employment." (*ibid*). The relief nature of this employment was thus clearly recognised. In fact, it was stipulated that such relief employment would be justified only if the contribution of the productive effort substantially lowered the cost of the relief to be provided.

2.14 Thus, though the Committee accepted and justified the first two objectives of policy, they recognised and emphasised the temporary holding and relief nature of such a policy. In fact, they were concerned that the policy might hamper the building up of a rational programme of future development. The Committee observed: "The objective of providing additional employment may be achieved by creating special opportunities of work to large numbers of people in productive activity carried on in ways which may yield only a very small amount of net income to them. Programmes of creation of such work would then have to be supported by direct or indirect subsidies to yield a minimum level of subsistence income. In effect this would involve relief of the unemployed through public funds with only a small contribution being received from the fruit of their employment. Further, if this involves either bringing in new persons who are not engaged traditionally in those occupations or creating new equipment for the purpose, it would result in the employment of labour in directions where its use is patently uneconomic The same reasoning applies to the extent and duration of the protection given to existing employment in means of production which have become completely obsolete or relatively very uneconomic." (*ibid*).

2.15 The same concern was expressed in the Second Five Year Plan in the following words: "From the economic as well as from the larger social viewpoint, expansion of employment opportunities is an objective which claims high priority, but, it is important to stress the fact that over a period the volume of employment grows only as the supply of tools and equipment on the one hand and of the wage goods on which the incomes of the newly employed come to be spent is expanded. It is only a truism that the problem of unemployment of an endemic kind is not acutest in the countries in which productivity is high because of the use of machinery and new techniques but in those in which low productivity limits the overall size of incomes,

inhibits the use of labour on works which do not add immediately to the supply of currently needed consumer goods and keeps down the size of the market. While it is imperative that in a country with an abundant supply of manpower labour-intensive modes of production should receive preference all along the line, it is nonetheless true that labour saving devices in particular lines are often a necessary condition for increasing employment opportunities in the system as a whole. The objective, it need hardly be stated, is increasing employment at rising levels of income." (Second Five Year Plan, pp. 27-28)

2.16 The policy initiated in the First Plan and elaborated in the Second Plan has continued, with minor modifications and shifts in emphasis, in subsequent Plans. In particular, the need to improve the productivity in the village and small industries and thus to reduce cost of protecting them from competition from the large industry has been repeatedly emphasised. Thus, the main objectives of programmes of village and small industries in the Third Plan were: "(i) to improve the productivity of the worker and reduce production costs by placing relatively greater emphasis on positive forms of assistance such as improvement of skill, supply of technical advice, better equipment and credit, etc., (ii) to reduce progressively the role of subsidies, sales rebates and sheltered markets; (iii) to promote the growth of industries in rural areas and small towns; (iv) to promote the development of small scale industries as ancillaries to large industries, and (v) to organize artisans and craftsmen on co-operative lines." (Third Five Year Plan, pp. 431-432)

2.17 The approach to the village and small industries in the Fourth Five Year Plan was spelt out in the following words: "The objectives of the programmes in the Fourth Plan are: to improve progressively the production techniques of small industries so as to enable them to produce quality goods and to bring them to a viable level; to promote decentralisation and dispersal of industries, and to promote agro-based industries. In order to achieve these aims, it would be necessary to improve skills and provide a combination of incentives and disincentives for securing decentralisation and dispersal of small industries. Fiscal and other measures are required to enable these industries to stand competition with large industries. The operation of the industrial licensing system has not been effective in preventing competition from the large industries and in providing the required degree of initial protection. Nor has it been possible to prevent concentration of industries in large cities and towns. Since a large number of industries is proposed to be delicensed during the Fourth Plan period, greater emphasis will have to be placed on a variety of positive measures of assistance including liberal credit facilities, adequate supply of scarce raw materials, provision of technical assistance and improved appliances, tax concessions and differential excise duties. It will be necessary to assist mechanised small scale industries to grow into larger and more viable units. Further, in order to protect small scale and traditional industries from undue competition, the existing reservations will be continued and modified in accordance with the requirements. This will have to be preceded by careful identification of industries, parts, components and processes in which the large size of operation or high degree of mechanization has no pronounced impact on economies. This identification would have to be followed by fiscal and credit policies and measures to accelerate their

development in the small sector, evolution of appropriate technology for smaller units in different industries, introduction of quality control and formulation of well co-ordinated programmes of assistance. Outside the designated field of small industries, the small and large industrial sectors would be developed, wherever possible, as complementary to each other so as to facilitate growth of ancillary industries." (Fourth Five Year Plan, pp. 287-288)

2.18 In the Fifth Plan, the strategy for the programmes for village and small industries was: "(i) to develop and promote entrepreneurship and provide a 'package of consultancy services' so as to generate maximum opportunities for employment particularly self-employment; (ii) facilitate fuller utilisation of the skills and equipment of the persons already engaged in different small industries; (iii) progressively improve the production techniques of these industries so as to bring them to a viable level, and (iv) promote these industries in selected 'growth centres' in semi-urban and rural areas including backward areas". (Fifth Five Year Plan, p. 164)

2.19 Reviewing the progress of the village and small industries, the Revised Draft Plan 1978-83 sums up the situation as follows: "The main objectives of the programmes for development of these industries taken up in the preceding Plan periods were to generate large scale employment opportunities, to promote decentralisation and dispersal of industries, to upgrade the skills of artisans and the quality of their products, to step up production of consumer goods, essential articles for the masses and those having a large potential for exports. To achieve these objectives, the earlier Plan envisaged, inter alia, promotion and development of entrepreneurship, provision of package of consultancy services, rebate on sale of handloom cloth/khadi cloth, credit guarantee scheme for small industries in respect of loans granted by eligible institutions including banks, formulation of common production programme for the small and large industries, concessional credit to cooperative societies in handloom and specified other broad groups of cottage industries, etc. ... Inadequacy of complete and up-to-date data for these industries particularly, the traditional village and household industries is a serious handicap in assessing the impact of the development programmes undertaken so far in achieving the objectives set out in the preceding Plan. ... Within the village and small industries sector, however, the modern small-scale industries and power-looms accounted for 92 per cent of the additional production. The increase in the value of production of the cottage and household sector was not so significant. The target of production of cloth set out for the handloom industry could not be achieved for various reasons including non-availability of hank yarn from the mills at fair prices and of requisite quality and working capital funds. The reasons for somewhat slow progress in some of the traditional industries could be attributed to a few missing links in the activities of a number of agencies and institutions responsible for implementation of a variety of schemes for the development of these industries. Common production programmes for these industries could not be formulated in detail. Scarce raw materials were not available to a large number of artisans and craftsmen and package of services such as finance, designs, technical assistance and marketing was not available to them. The khadi and handloom industries in particular experienced marketing problems from time to time resulting in high inventory and locking up of funds." (paras 24.3, 24.4 and 24.6)

2.20 In spite of this performance over five Plans, the objectives, strategy and

programmes with regard to the village and small industries in the proposed Plan for 1978-83 remain inevitably the same. They are as follows: "A rapid and wide-spread development of small industries including cottage, household and small scale industries is one of the major objectives of the Plan as a part of the primary goals of reducing unemployment and underemployment, to achieve an appreciable rise in the standard of living of the poorest sections of the population and widening of industrial base. The major components of the programme to be taken up in the new Plan are:—

(i) to generate opportunities for fuller and full-time employment by:

(a) revitalising and developing the existing traditional and other small industries; and

(b) promoting intensive development of new viable small industries;

(ii) to raise the level of productivity and earnings of rural artisans, handloom weavers, craftsmen and others employed in these industries;

(iii) to promote the growth of these industries in rural areas and small towns; and

(iv) to reduce progressively the extent of general subsidies, by providing them selectively for credit, development of skills, improvement in designs and techniques and expansion of marketing facilities. "(Revised Draft Plan 1978-83 — para 24.18)

2.21 Thus, the employment potential of the village and small industries has been recognised beginning with the First Five Year Plan. Strategies and programmes have been designed for the full exploitation of this potential and, in spite of rather unsatisfactory performance, have been continued from Plan to Plan right into the Revised Draft Plan 1978-83. Differential excise taxation has been recognised as an important instrument of policy to promote labour-intensive production though sufficient attention has not been paid to rationalise its structure. Provisions in direct taxation have also not been specifically examined from the point of view of their effect on employment. These constitute our main terms of reference. Other instruments of the policy to promote labour-intensive production have been physical regulation and direction of production and provision of necessary infrastructure for the supply of raw materials, credit, and technical assistance to the village and small industries and for marketing their output. Though these components are not specifically covered by our terms of reference, we wish to emphasise their importance. In the absence of such supporting infrastructure, tax incentives and disincentives by themselves will not only be not fully effective but their benefits and advantages may be usurped by unintended quarters.

APPENDIX

GROWTH OF EMPLOYMENT IN RELATION TO GROWTH OF PRODUCTION

A.2.1 While describing the employment situation in the country as it has developed over the past half a century, the Revised Draft Plan 1978-83 noted that between 1961 and 1976, in the modern factory sector, while output increased 161 per cent the employment increased only 71 per cent. This could happen partly as a result of (i) a change in the composition of industrial output as between more labour-intensive and less labour-intensive industries and partly because of (ii) a change from more labour-intensive to less labour-intensive technologies in many industries. In relation to the changes taking place in the modern factory sector, we are primarily concerned with the latter type of change, namely a change from more labour-intensive to less labour-intensive technology in particular industries. This requires an examination of growth of output and employment industry by industry. The study was entrusted to the Gokhale Institute of Politics and Economics, Pune. In the following are the main results of the study.

A.2.2 The study pertains to 27 industries for which production and employment data are available for the period 1960-1975. The production data, in the form of indices, are taken from the Monthly Statistics of Industrial Production (1967, 1976). The published index numbers upto 1971 are to the base 1960. Beginning with 1971, the index numbers are to the base 1970. For the latter years 1971-1975, the base is shifted from 1970 to 1960 by the simple chain method. The data for the year 1967, 1968, 1971 and 1972 are omitted as the corresponding data on employment are not available.

A.2.3 The employment data are taken from the Annual Survey of Industries (Individual Industry Volumes: 1960-70: Census Sector, Central Statistical Organisation. 1959-1970: Sample Sector. National Sample Survey. 1973, 1974, 1975: Summary Results. Central Statistical Organization.) Data for 1967, 1968, 1971 and 1972 are not available. All data are converted to index numbers with 1960 as base. In Table A.2.1 are given the 27 industries with their ASI and MSP code numbers. Table A.2.2 gives the index numbers of their production and employment for the year 1975 (with 1960=100). The growth of employment relative to growth in production may be judged by these indices. However, the comparison is affected by any accidental features of the base year 1960 and the end year 1975. Hence, it was thought advisable to find the trend taking into account all the years' data.

A.2.4 For this purpose, a long-linear function is fitted with employment (y) as dependent variable and production (x) as independent variable ($\log y = a + b \log x$) separately for each industry. The coefficient 'b' gives the employment elasticity with respect to production. Thus, for instance $b = 0.8$ means that with one per cent increase in production, employment increased by only 0.8 per cent. In Table A.2.3 the employment elasticities as indicated by the values of b are given. The values of the coefficient of multiple regression R^2 are given alongside. Higher values of R^2 indicate stronger relation between employment and production. In 17 out of the 27 industries, the value of R^2 is greater than 0.5. These are listed below in the descending order of the value of b, namely, the coefficient of employment elasticity with respect to production.

Table A.2.1

(ASI & MSP) Code Numbers of selected Industries

Sr. No.	ASI Code No.	MSP Code No.	Name of Industry
1	204	205	Grain mill products
2	205	206	Bakery products
3	206	207	Sugar factories and refineries.
4	209	208	Cocoa, chocolate and sugar confectionery
5	225, 226, 227, 228, 229	22	Tobacco manufactures
6	231, 232, 235, 236, 239, 241, 242, 243, 244, 245, 246, 247, 248, 251, 252, 253	23	Textiles
7	264, 266, 291	24	Footwear, other wearing apparel and made up textiles.
8	280, 281, 283	27	Paper and paper products
9	290	29	Leather and fur products except footwear and other apparel
10	300, 301, 302	30	Rubber products
11	310, 311, 313, 314, 319	311	Basic industrial chemicals (including fertilizers)
12	315	312	Vegetable and animal oil and fat.
13	320	331	Structural clay products
14	321	332	Glass and glass products
15	322, 323	333	Pottery, china and earthenware.
16	325, 326, 327, 328, 329	339	Non-metallic mineral Products n. e. c.
17	330, 331, 332	34	Basic metal industries
18	333, 334, 335, 336, 339	342	Non-ferrous basic metal industries.
19	340, 341, 342, 343, 344, 345, 349	35	Metal products except machinery and transport equipment.
20	350, 351, 352, 353, 354, 355, 356, 357, 358, 359	36	Machinery except electrical
21	360, 361, 362, 363, 364, 365, 366, 367, 369	37	Electrical machinery, apparatus, appliances and supplies
22	371, 372, 373	382	Railroad equipment
23	374	383	Motor vehicles
24	380	391	Professional, scientific measuring and controlling instruments
25	382	393	watches and clocks
26	304, 305	32	Products of petroleum and coal
27	324	334	Cement

Table A.2.2

INDEX OF PRODUCTION AND EMPLOYMENT IN SELECTED INDUSTRIES

Sr. No.	Index of Production (1960=100)	Index of employment (1960=100)	Employment elasti- city w. r. t. output	R ²
	1975	1975		
1	160.31	121.96	-0.01620	.00213
2	242.85	116.63	0.91971	.93855
3	180.39	163.76	0.99163	.68389
4	46.76	107.26	0.05482	.00782
5	161.45	166.40	0.19975	.02769
6	111.13	100.21	0.35967	.39309
7	146.62	195.92	1.13649	.20939
8	237.72	110.80	0.75672	.51304
9	81.10	88.32	-0.39417	.59423
10	264.45	96.16	0.59631	.90083
11	448.14	148.45	1.10822	.93709
12	494.19	252.78	0.94348	.81060
13	370.14	117.18	0.23194	.85234
14	367.29	115.55	0.25616	.79450
15	170.43	84.32	0.31029	.19125
16	130.86	123.00	1.14911	.21152
17	205.30	125.12	1.06104	.79932
18	166.98	117.90	0.92690	.77824
19	238.13	94.79	0.70601	.90891
20	459.93	118.12	0.49287	.82672
21	263.24	119.69	-1.03664	.94342
22	314.44	71.52	-0.00334	.00003
23	332.23	60.17	0.18589	.18030
24	90.14	109.84	-0.13063	.01456
25	266.05	144.69	2.05721	.68097
26	232.01	110.79	1.08516	.76931
27	209.48	114.90	0.37102	.73450

Table A.2.3:

Elasticity of Employment with respect to production.

Sr.No.	Industry	Coefficient of Employment Elasticity w.r.t Production
25	Watches and Clocks	2.05721
11	Basic industrial chemicals (including fertilizers)	1.10822
26	Products of Petroleum and Coal	1.08516
17	Basic Metal Industries	1.06104
21	Electrical machinery, etc.	1.03664
3	Sugar factories and refineries	0.99163
12	Vegetable and Animal oil and Fat	0.94348
18	Non-ferrous basic metal industries	0.92690
2	Bakery products	0.91971
8	Paper and Paper products	0.75672
19	Metal products except machinery and transport equipment	0.70601
10	Rubber products	0.59631
20	Machinery except electrical	0.49287
27	Cement	0.37102
14	Glass and glass products	0.25616
13	Structural clay products	0.23194
9	Leather products other than footwear	0.39417

It will be noticed that not in all industries has the growth in employment a tendency to fall behind the growth in production. In the first five industries, the growth in employment has been in fact faster than in production. In the next four industries, the employment has grown not as fast as the production, but the difference is not large. In the last eight industries, the growth in employment has been much slower than the growth in production; these are paper and paper products, metal products other than machinery, rubber products, machinery other than electrical, cement, glass and glass products, structural clay products, and leather products other than footwear. It should be noted that the industries listed are in fact groups of industries and not in all of the industries of a group, employment would have fallen behind production. For meaningful results, the analysis must be done for industries more specifically defined, preferably by four digit code of the ASI. The necessary disaggregated data for production and employment are not readily available.

CHAPTER III

PROVISIONS IN CENTRAL DIRECT TAX LAWS HAVING INFLUENCE ON EMPLOYMENT AND LABOUR-INTENSIVE TECHNIQUES

3.1 Our terms of reference require us (i) to identify provisions in Central tax laws which have an influence on employment, (ii) to examine their impact on employment and techniques of production, and (iii) to suggest appropriate changes in Central tax laws so as to promote employment and adoption of labour-intensive methods of production. It will be convenient to divide the discussion into two parts, namely one regarding direct taxes and the other regarding indirect taxes. In this chapter and the following, we shall deal with direct taxes.

3.2 Direct taxes influence employment in the economy in various ways. Since employment depends, among other factors, on the level of investment in the economy, any thing which affects savings and investment also affects employment. It has been argued that the burden of income taxation in India is too heavy to permit adequate savings and promote necessary investment; that, apart from high rates of taxation of both corporate profits and personal incomes, the corporate profits, when distributed, are taxed twice, once in the hands of the companies and again in the hands of the shareholders¹. Hence, it is said, an essential condition for growth of output and employment is to reduce the burden of taxation by lowering the tax rates both on corporate profits and personal incomes and mitigating double taxation of distributed profits. This is clearly a debatable proposition. It is generally recognised that the relation between taxation and investment is complex and that, more than the level of taxation, the important factor affecting investment is what is called the 'climate' for investment. The proposition also raises questions of the relative roles of the public and private investment and the extent to which the country should depend upon private investment on its own terms which are essentially political issues and, in our opinion, they are beyond the scope of an expert committee such as ours. Therefore, we propose to keep the question of level of taxation out of our consideration and confine our attention to those provisions in the tax system which are likely to influence decisions regarding choice of technology and scale of production. The most notable of such provisions in the Central direct tax laws are: (i) the investment allowance for new plant and machinery, and (ii) tax holiday for new industrial undertakings.

3.3 Since 1976, the Income-tax Act provides for an investment allowance in the form of a deduction in the initial year at the rate of 25 per cent of the cost of new plant and machinery installed in industries other than those specified in the Eleventh Schedule to the Act. Where the plant and machinery uses know-how developed indigenously, the rate of investment allowance is 35 per cent. The investment allowance is available over and above the depreciation allowances. An outline of the depreciation allowances currently available as also the investment allowance is given in Parts I(1) and I(2) of the Appendix to this chapter. The provisions relating to investment allowance are broadly on the same pattern as those of development rebate

1. Some relief is given only in the case of inter-corporate dividends (vide section 80M of the Income-tax Act).

which was allowed until 1974¹. The industries eligible for the investment allowance, when the provision was first introduced, were enumerated in the Ninth Schedule to the Income-tax Act. In 1977, an amendment was made in the Act as a result of which the investment allowance is not available for new plant and machinery used in industries specified in the Eleventh Schedule to the Income-tax Act (hereinafter referred to as non-priority industries). Only small-scale units are eligible for the allowance regardless of the nature of the product manufactured. For this purpose, a unit is regarded as 'small' if its investment in plant and machinery does not exceed Rs. 10 lakhs at original cost.

3.4 The central point to be noted is that since the benefit of investment allowance is granted in addition to depreciation, the total amount which is allowed to be written off for purposes of income-tax in respect of new plant and machinery exceeds 100 per cent of its cost. An important condition governing the grant of investment allowance is that an amount equal to 75 per cent of the allowance must be credited to a separate reserve account. The amount so credited has to be utilised within a period of ten years for acquiring new machinery or plant. A similar reserve had to be created for development rebate also, with the difference that there was no requirement for amounts credited to the development rebate reserve account to be utilised for acquiring new plant and machinery. Only, they could not be utilised for distribution of dividends or remittances out of India for a period of eight years.

3.5 The provision for tax holiday is intended to stimulate and assist new investment and to diversify industrial production. An outline of the tax holiday provisions is given in Part I(3) of the Appendix. Briefly, the concession is available in respect of profits of new industrial undertakings, including those set up by existing enterprises, for the first five years from the year in which the undertaking goes into production (7 years in the case of co-operatives) subject to a maximum of 7.5 per cent of the capital employed in the case of corporate taxpayers and 6 per cent in the case of others. Where the profits fall short of the said percentage of capital employed, the deficiency is allowed to be carried forward upto the end of the seventh year from the end of the initial assessment year. Until recently, the term 'capital employed' used in this context covered not only the owners' capital and reserves but also long-term borrowings. By an amendment made in 1971, long term borrowings were excluded from the capital base for purposes of computation of profits entitled to tax holiday. The Wealth-tax Act also grants exemption for new issues of industrial undertakings in the priority sector for a period of five years, subject to certain conditions.

3.6 Further, under the Wealth-tax Act, a taxpayer is entitled to exemption upto certain limits in respect of the value of assets forming part of an industrial undertaking belonging to him, as also the value of his interest in the assets forming part of an industrial undertaking belonging to a firm or an association of persons of which he is a partner or a member. Such assets qualify for exemption from wealth-tax upto a value of Rs. 1,50,000 along with the value of specified financial assets, such as Government securities, shares, notified debentures, units in the Unit Trust of India, deposits with banking companies, etc. Any land or building or any rights in

1. In certain cases the development rebate was allowed if the machinery etc. was installed before June 1, 1975. For ships, the rebate was available upto the end of 1976.

any land or building or other assets of the industrial undertaking which are otherwise exempt from wealth-tax under section 5(1) of the Wealth-tax Act, are not taken into account for the purpose of this exemption¹. An industrial undertaking, for the purpose of this provision, has been defined to mean an undertaking engaged in the business of generation or distribution of electricity or any other form of power or in the construction of ships or in the manufacture or processing of goods or in mining.

3.7 Incentives designed to stimulate growth of investment like the investment allowance and tax holiday which are related to capital are generally regarded as responsible for creating a bias in favour of capital-intensive technology. This bias arises from the fact that with a concession like the investment allowance, the cost of plant and machinery gets reduced. For example, on the installation of machinery worth Rs.1 lakh, the investment allowance reduces the tax liability of a company paying tax at the current rates² by Rs.14781 which means a reduction of 14.78 per cent in the cost of the machinery (20.69 per cent in the case of machinery using know-how developed indigenously). The tax holiday also has a similar effect to some extent.

3.8 There are, on the other hand, a number of provisions which serve to promote employment by reducing the cost of employing labour. Apart from the fact that wages paid to employees are fully deductible in the computation of taxable profits, the Income-tax Act permits deduction for the employers' contributions to provident funds, superannuation funds and gratuity funds where the funds are recognised or approved, subject to certain limits. Expenditure of a revenue nature incurred for the welfare of labour employed by business concerns is also deductible for income-tax purposes. Buildings used solely for the purpose of residence of low-paid employees or for the welfare of such employees such as hospitals, creches, schools, canteens, etc. are allowed to be depreciated on a more liberal scale than that applicable to others. An additional depreciation of 40 per cent is allowed in the initial year in respect of such buildings. Similarly, while providing that a part of the expenditure incurred on advertisement, publicity and sales promotion shall be disallowed in the computation of taxable profits where such expenditure exceeds Rs.40,000 in a year, the Income-tax Act makes an exception *inter alia* for salaries paid to employees engaged for the purpose of advertisement and sales promotion.

3.9 The Indian income-tax system also provides substantial incentives for development of indigenous know-how and technology. Investment allowance for new plant and machinery is granted at the higher rate of 35 per cent if it uses any technology developed in a recognised institution or laboratory in India as against 25 per cent in the case of other plant and machinery. Concession is also allowed to Indian companies for income derived by them by way of royalty, commission, fees or any other payment (other than capital gains) for supplying technical know-how if certain conditions are fulfilled. These provisions should be of help in developing technology more suited to the factor endowments of the country and thus reduce dependence on foreign technology which is usually more capital intensive.

1. Vide sections 5(1)(xxxi) and 5(1)(xxxii) of Wealth-tax Act, 1957.

2. In the generality of cases, the rate of tax on corporate income including surcharge is 59.125 per cent (55+7.5% thereof).

3.10 The tax system contains provisions which raise the cost of moneys borrowed. A part (15%) of the expenditure incurred by way of interest paid by a company other than a banking or financial company on deposits received by it is disallowed in computing the profits and gains of the business of the company. This, in a way, operates to raise the cost of capital raised through public deposits by non-banking and non-financial companies. Until 1978, there was a tax on the interest income of banks which, in effect, raised the cost of borrowings. The tax was withdrawn through Finance Act, 1978.

3.11 The provisions of section 72A introduced in the Income-tax Act in 1977 to facilitate the revival of sick industrial units also serve the objective of employment promotion. The provision allows the unabsorbed depreciation allowances and accumulated losses of a sick industrial unit to be carried forward and set off against the profits of the company taking over the sick unit, provided the take-over is carried out under a scheme of merger approved by the 'Specified Authority'. One of the general criteria adopted for the approval of a merger for this purpose is that either the value of plant and machinery in the sick unit is not less than Rs. 50 lakhs or the number of workers of the unit sought to be revived is at least 100.

3.12 While the provisions mentioned in paragraphs 3.8 and 3.9 above have the effect of reducing the cost of labour employed by tax-paying business concerns, facilities like deduction for retrenchment compensation available for tax purposes might be considered as going against the objective of employment promotion. At the same time, one can argue that without such deduction the cost of employing labour would go up and consequently employers would hesitate to employ more persons.

3.13 Another set of provisions in the direct tax laws which may have an influence on employment, are those designed to encourage the growth of small-scale industry. The investment allowance is available to all small-scale units regardless of the nature of the product they manufacture, whereas for others such allowance is not granted if they are engaged in the manufacture of non-priority articles. Under another provision of the Income-tax Act, 1961 (section 80 HHA), a small-scale industrial undertaking is allowed a deduction equal to 20 per cent of the profits for the first ten years, if it is set up in a rural area. Companies with relatively small incomes are taxed at lower rates¹.

3.14 Similarly, co-operative societies are accorded preferential tax treatment. Thus, for co-operative societies the rates of tax are graduated from 15 per cent on the first Rs. 10,000 to 40 per cent on income exceeding Rs. 20,000. In computing the total income of a co-operative society, deduction is allowed upto Rs. 40,000 in the case of a consumers' co-operative and upto Rs. 20,000 in the case of others. Co-operatives engaged in banking, cottage industry, marketing of agricultural produce, processing of agricultural produce of members without the aid of power, fishing or allied activities, labour co-operatives, and primary co-operative societies engaged in supplying milk raised by members to specified agencies, are

1. Currently, a widely held domestic company has to pay income tax at the rate of 45 per cent if its total income does not exceed Rs. 1,00,000 as against the general rate of 55 per cent. A closely-held industrial company is also taxed at differentially lower rate if its total income does not exceed Rs. 2,00,000. In addition, a surcharge of 7.5 per cent of income-tax is also leviable.

wholly exempt from income-tax. Subject to certain conditions, the income of an institution constituted as a public charitable trust or as a registered society existing solely for the development of khadi or village industries derived from the business of production, sale, or marketing of khadi or products of village industries is also exempt from taxation.

3.15 Further, a deduction of Rs.10,000 or one-third of the profits, whichever is higher, is allowed in the computation of taxable income from the business of live-stock breeding, poultry and dairy farming. A deduction of upto one-third of the profits or Rs.10,000, whichever is less, is allowed from the business income derived from growing mushrooms. A weighted deduction is available for expenditure incurred by a company or a co-operative society engaged in the manufacture or processing of products of agriculture, animal husbandry, dairy or poultry farming in providing specified goods and services (like fertilisers, seeds, etc.) and dissemination of modern techniques in agriculture, animal husbandry, dairy or poultry farming to farmers or growers of such products. Expenditure incurred by companies and co-operatives on approved schemes of rural development is tax deductible. Income from new houses enjoys some concession for the initial years (a deduction of upto Rs.2,400 per annum is allowed from the income from new houses for the first five years) while income from owner-occupied houses is taxed on a concessional basis. To the extent that these activities are labour-intensive, these provisions can be said to have an influence on employment.



APPENDIX

(I) Depreciation, Investment Allowance and Tax Holiday Provisions in Income tax-Act, 1961.

(1) Depreciation Allowances

A3.1 The Indian Income-tax law allows a specified percentage of the cost of depreciable assets used for purposes of business or profession to be written off against taxable profits. While the provision permitting the deduction for depreciation is contained in section 32 of Income-tax Act, 1961, the rates are laid down in the Income-tax Rules, 1962.

A3.2 The rates of depreciation allowance were amended with effect from April, 1970 with a view to liberalising these allowances and simplifying calculations. Under the amended rules, machinery and plant has been classified under seven broad categories of useful life, with rates of depreciation of 5 per cent, 10 per cent, 15 per cent, 20 per cent, 30 per cent, 40 per cent, and 100 per cent in replacement of the previous seventeen rates ranging from 2.5 per cent to 100 per cent. The general and residuary rate of depreciation in respect of machinery and plant was increased from 7 per cent to 10 per cent. Items of machinery and plant which have useful life of one or two years have been classified under the rate category of 100 per cent. Further, depreciation for full year is admissible even in respect of assets used only for a part of the year.

A3.3 Where the cost of any machinery or plant does not exceed Rs.750, the entire amount of the actual cost is allowed as a deduction by way of depreciation.

A3.4 In the case of approved hotels, an extra allowance equal to 50 per cent of the normal depreciation can be claimed on machinery and plant.

A3.5 An extra shift allowance upto 50 per cent of the normal depreciation is allowed depending on the number of days for the period for which the plant and machinery has worked double shift. The allowance is increased upto another 50 per cent of the normal depreciation where the plant and machinery works triple shift. The normal number of working days for purposes of calculating the allowance for multiple shifts is taken at 180 for seasonal factories and 240 for other factories.

(2) Investment allowance under section 32A of the Income-tax Act.

A3.6 Under section 32A of the Income-tax act, 1961, a taxpayer is entitled to an investment allowance at the rate of 25 per cent of the actual cost of the following assets:—

- (i) New ships or new aircraft acquired by the taxpayer engaged in the business of operation of ships or aircraft.
- (ii) New machinery or plant installed for the purposes of business of generation or distribution of electricity or any other form of power.

- (iii) New machinery or plant installed for the purposes of business of construction, manufacture or production of any article or thing, other than an article or thing specified in the Eleventh Schedule to the Income-tax Act (reproduced at the end of this Appendix).
- (iv) New machinery or plant installed in a small-scale industrial undertaking for the purposes of business of manufacture or production of any article or thing.

A3.7 For the purposes of this provision, any re-conditioned machinery or plant imported from abroad is regarded as new machinery or plant, if the following conditions are fulfilled, namely:—

- (i) such machinery or plant, prior to the date of such installation by the taxpayer, was not used in India;
- (ii) such machinery or plant is imported in India from any foreign country; and
- (iii) no deduction on account of depreciation in respect of such machinery or plant has been allowed or is allowable under the provisions of the Indian Income-tax Act, 1922 or the Income-tax Act, 1961 in computing the total income of any person for any period prior to the date of the installation of the machinery or plant by the taxpayer.

A3.8 The Central Government has been empowered to omit, by notification in the Official Gazette, any article or thing from the list of articles or things specified in the Eleventh Schedule, if it considers necessary or expedient so to do.

A3.9 At times, machinery or plant installed and used mainly for the purposes of business of construction, manufacture or production of any article or thing not specified in the Eleventh Schedule may have been partly used for the purposes of business of manufacture or production of any article or thing specified in the said Schedule. It has been provided that investment allowance will not be denied by reason only that machinery or plant installed and used mainly for the purpose of business of construction, manufacture or production of any article or thing not specified in the Eleventh Schedule is also used for the purposes of business of manufacture or production of any article or thing specified therein.

A3.10 Investment allowance is not admissible in respect of the following assets, namely:—

- (i) Machinery or plant installed in any office premises or any residential accommodation, including accommodation in the nature of a guest house.
- (ii) Office appliances and road transport vehicles.
- (iii) Ships, machinery or plant in respect of which deduction by way of development rebate is admissible.

(iv) Machinery or plant the whole of the actual cost of which is allowed as a deduction (whether by way of depreciation or otherwise) in computing the taxable income of any one previous year. Thus, no investment allowance is admissible in respect of:—

- (a) any machinery or plant, the actual cost whereof being less than Rs. 750, is allowed to be written off by way of depreciation allowance;
- (b) any machinery or plant on which depreciation is admissible at the rate of 100 per cent; or
- (c) any machinery or plant, the entire cost of which is allowed as a deduction under section 35(2) (ia) by way of expenditure of a capital nature on scientific research.

A3.11 Under section 32A(2B), investment allowance is granted at the higher rate of 35 per cent in respect of machinery or plant installed after 30th June, 1977 but before 1st April, 1982 for the purposes of business of manufacture or production of any articles other than the non-priority ones —

- (i) the article or thing is manufactured or produced by the taxpayer by using any technology (including any process or other know-how) developed in a laboratory owned or financed by the Government or a laboratory owned by a public sector company or a University or by an institution recognised in this behalf by the prescribed authority; or
- (ii) the article or thing manufactured or produced by the taxpayer is an article or thing invented in a laboratory specified in (i) above.

A3.12 Investment allowance is granted over and above the full cost of the asset which is allowed to be written off against taxable profits by way of depreciation during the useful life of the asset.

A3.13 Investment allowance is admissible only if the prescribed particulars have been furnished by the taxpayer in respect of the ship, aircraft, machinery or plant and an amount equal to 75 per cent of the amount of investment allowance (50 per cent in the case of a ship) to be actually allowed is debited to the profit and loss account of the relevant previous year and credited to the "Investment Allowance Reserve Account". The reserve so created is required to be utilised for acquiring new machinery or plant for the purposes of business of the undertaking during a period of ten previous years next following the previous year in which the ship or aircraft was acquired or the machine or plant was installed. During the interregnum, the amount credited to the Investment Allowance Reserve Account can be utilised for the purpose of the business of the undertaking other than (a) for distribution by way of dividends or profits, or (b) for remittances outside India as profits or for the creation of any asset outside India.

A3.14 Where any of the conditions subject to which the investment allowance was admissible is contravened, the investment allowance is withdrawn by amending the assessment for the year in which the allowance was made.

(3) Tax Holiday

A3.15 Under section 80J of the Income-tax Act, a "tax holiday" is granted in respect of a specified percentage of profits made by a taxpayer from any industrial undertaking including a cold storage plant newly set up in India. This concession is also available in relation to profits derived by an Indian company from the business of an approved hotel or from plying of ships. The tax holiday has been in operation since 1948 and is given in the form of exemption from income-tax up to a specified percentage of the capital employed in the undertaking, hotel or ship for five successive assessment years beginning with the assessment year relevant to the accounting year in which the undertaking goes into production or starts operation of the cold storage plant or the hotel starts functioning or the ship is first put to use. The specified percentage in the case of a company is 7.5 while in the case of other categories of taxpayers, it is six. In the case of co-operative societies, the tax holiday period extends to seven years as against five years in the case of other categories of taxpayers. Any deficiency in the statutory percentage of profits in any year is carried forward up to the end of the seventh assessment year from the end of the initial assessment year.

A3.16 The provisions of tax holiday apply to any industrial undertaking which fulfils the following conditions, namely:-

- (i) It is not formed by the splitting up or reconstruction of a business already in existence.
- (ii) It is not formed by the transfer to a new business of machinery or plant previously used for any purpose.

In the case of an industrial undertaking, where any machinery or plant or any part thereof used previously for any purpose is transferred to the new business, and the total value of the machinery or plant or part thereof so transferred does not exceed 20 per cent of the total value of the machinery or plant used in that business, this condition is regarded as having been fulfilled.

- (iii) It commences to manufacture or produce any article, other than an article specified in the Eleventh Schedule to the Income-tax Act or operate one or more cold storage plants in any part of India, before April 1, 1981.
- (iv) If it is a manufacturing concern, the undertaking employs at least 10 workers in a manufacturing process carried on with the aid of power or at least 20 workers if no power is used.

Where any building or any part thereof earlier used for any purpose is transferred to the business of the industrial undertaking, the value of such building or the part so transferred is not taken into account for the purpose of computation of the capital employed in the industrial undertaking.

A3.17 Rule 19A of the Income-tax Rules, 1962 specifies the manner of computation of capital employed in an industrial undertaking or ship or in the business of a hotel. The capital employed in an industrial undertaking is determined by deducting the aggregate of the liabilities as on the 1st day of the computation period from the value of the assets of the undertaking as on that day. Under the existing provisions, all borrowed moneys, whether by way of debentures, long-term borrowings or otherwise are excluded in computing the capital employed in a new industrial undertaking or ship or hotel.

A3.18 Prior to the amendment of rule 19A made by the Income-tax (Third Amendment) Rules, 1971, the capital base of a new industrial undertaking or a hotel included all debentures (in the case of a company) and certain long-term borrowings from approved sources (in the case of all categories of taxpayers) for the purpose of the provisions of section 80J.

A3.19 As the interest payable on debentures and all borrowings was already allowed as a deduction in arriving at the profits of the industrial undertaking or hotel, the inclusion of such debentures and long-term borrowings again in the capital base and exemption of profits up to the specified percentage of such capital base amounted to a double advantage, besides creating a bias in favour of borrowed capital as against owned capital. The amendment of rule 19A described above removed this anomaly.

(II) THE ELEVENTH SCHEDULE TO INCOME-TAX ACT, 1961

List of articles or things

1. Beer, wine and other alcoholic spirits.
2. Tobacco and tobacco preparations, such as, cigars and cheroots, cigarettes, biris, smoking mixtures for pipes and cigarettes, chewing tobacco and snuff.
3. Cosmetics and toilet preparations.
4. Tooth paste, dental cream, tooth powder and soap.
5. Aerated waters in the manufacture of which blended flavouring concentrates in any form are used.
6. Confectionery and chocolates.
7. Gramophones, including record players, and gramophone records.
8. Broadcast television receiver sets; radios (including transistor sets); radiograms and tape recorders (including cassette recorders and tape decks).
9. Cinematograph films and projectors.
10. Photographic apparatus and goods.
11. Electric fans.
12. Domestic electrical appliances, not falling under any other item in this list.

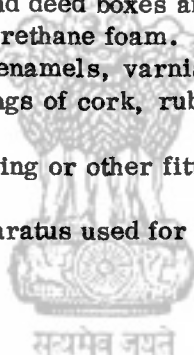
Explanation:- "Domestic electrical appliances" means electrical appliances normally used in the household and similar appliances used in places, such as, hotels, restaurants, hostels, offices, educational institutions and hospitals.

13. Household furniture, utensils, crockery and cutlery not falling under any other item in this list.
14. Pressure cookers.

15. Vacuum flasks and other vacuum vessels.
16. Tableware and sanitaryware.
17. Glass and glassware.
18. Chinaware and porcelainware.
19. Mosaic tiles and glazed tiles.
20. Organic surface active agents; surface active preparations and washing preparations whether or not containing soap.
21. Synthetic detergents.
22. Office machines and apparatus such as typewriters, calculating machines, cash registering machines, cheque writing machines, intercom machines and teleprinters.

Explanation: The expression "Office machines and apparatus" includes all machines and apparatus used in offices, shops, factories, workshops, educational institutions, railway stations, hotels and restaurants for doing office work for data processing and for transmission and reception of messages.

23. Steel furniture, whether made partly or wholly of steel.
24. Safes, strong boxes, cash and deed boxes and strong room doors.
25. Latex foam sponge and polyurethane foam.
26. Pigments, colours, paints, enamels, varnishes, blacks and cellulose lacquers.
27. Crown corks, or other fittings of cork, rubber, polyethylene or any other material.
28. Pilfer-proof caps for packaging or other fittings of cork, rubber, polyethylene or any other material.
29. Amplifiers or any other apparatus used for addressing public.



CHAPTER IV

IMPACT OF CENTRAL DIRECT TAX LAWS ON EMPLOYMENT AND PRODUCTION TECHNIQUES

4.1 Among the various provisions in the Income-tax Act which prima facie have a bearing on employment and choice of technology, the most important is the investment allowance. A similar incentive called development rebate was in operation during 1955-74. The total amounts allowed as deduction on account of the investment allowance/development rebate in income-tax assessments are not known, much less the employment effect of installation of plant and machinery facilitated by the allowance/rebate. The Reserve Bank of India (RBI) studies on company finances provide the figures of amounts outstanding in the development rebate/investment allowance reserve account. But these figures only show the net amount after taking into account the amounts credited and debited in a year and do not throw any light on the actual amounts transferred to the Reserve Account. Thus it is not possible to estimate the amounts claimed as investment allowance from the RBI studies. A rough idea of the dimensions of the amount of investment allowance claimed annually can, however, be derived indirectly from the total amount of investment in plant and machinery for which information is available from the RBI studies.

4.2 The latest year for which RBI data on company finances are available for all categories of companies is 1975-76. The investment of different categories of companies in plant and machinery during that year was of the following order:

1.	<u>Public Limited Companies</u>	(Rs. crores)
	(i) Medium and large (1650)	586.47
	(ii) Small (678)	1.27
2.	<u>Private Limited Companies</u>	
	(i) Medium and large (1001)	33.76
	(ii) Small (1125)	2.70
3.	<u>Government Companies</u>	
	(i) Central (89)	639.23
	(ii) State (85)	42.95
		<u>1,306.38</u>

(Figures in brackets indicate the number of companies covered.)

4.3 The above amounts indicate the investment of selected companies in plant and machinery during 1975-76. From a comparison of the data given in the studies of selected companies with those in the census of public limited companies for 1971-72 carried out by the Reserve Bank¹, it would appear that the coverage of

1. RBI Bulletin, June 1978

the RBI studies on the basis of which the preceding table has been drawn up is fairly exhaustive and that the total amount of investment in plant and machinery for the corporate sector as a whole in 1975-76 is unlikely to be much more than Rs.1,400 crores. Allowing for some growth in investment in later years and also taking into account the non-corporate sector, the aggregate investment in plant and machinery may currently be put at Rs.2,000 crores per annum. Data available with the Committee show that about 60 per cent of the investment made by large companies is eligible for investment allowance¹, which applied to Rs.2,000 crores comes to Rs.1,200 crores. The amount of allowance, calculated at the rate of 25 per cent of this, works out to Rs.300 crores, the tax effect of which at current rates would be in the neighbourhood of Rs.175 crores. The revenue cost would be higher to the extent the investment allowance is claimed at the rate of 35 per cent which is granted for new machinery and plant if it uses the know-how developed indigenously (in laboratories specified for this purpose). It should be noted that since the bulk of the investment in plant and machinery is in Government enterprises (more than 50 per cent in 1975-76), the net outflow from the Government's funds as a result of the investment allowance is unlikely to be more than Rs.100 crores a year.

4.4 As regards the revenue cost of tax holiday, the All India Income-tax Statistics published by the income-tax Department contains information regarding the total amount allowed as deduction under this provision and its effect on tax-revenue. According to the latest available data from this source, the deduction allowed towards tax holiday amounted to Rs.3.68 crores in 1976-77 with a tax effect of Rs.2.09 crores. However, it was felt that these figures were not complete. In order to have a comprehensive picture of the revenue cost of tax holiday, information was obtained by the Committee on a census basis from the Income-tax Department for all companies which claimed any deduction under this head for the years 1975-76 and 1976-77. The relevant figures for the respective

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1. This is derived as follows: According to data published in RBI Bulletin June, 1979 the amount of investment in plant and machinery by 415 large public limited companies in 1977-78 was of the order of Rs.517 crores, whereas information available with the Committee shows that allocation to Investment Allowance Reserve during that year came to about Rs.51 crores. Since the reserve for investment allowance is required to be created for only 75 per cent of the allowance, the amount of investment allowance claimed by the said companies works out to Rs.68 crores and since the allowance is given at the rate of 25 per cent, the total amount of eligible investment during the year may be put at Rs.272 crores which is about 53 per cent of the total investment in plant and machinery by these companies. With the widening of the scope of the allowance in 1977 to cover all plant and machinery except those used for manufacturing non-priority items, the proportion of eligible investment may now be put at 60 per cent.

years are as follows:

	(Rs. crores)	
	1975-76	1976-77
1. Deduction allowed under section 80J of the I. T. Act (including deficiency in the tax holiday profits carried forward from preceding years)	32.30	33.64
2. Tax effect	15.52	18.30

Allowing for the fact that the figures cover only corporate assesseees, the total amount of revenue cost of tax holiday for 1976-77 might be put at Rs.20 crores. With the amendment made in the law in 1979 whereby tax holiday is granted to new industrial undertakings producing articles not coming within the prohibited category (as listed in the Eleventh Schedule to the Income-tax Act), the revenue cost of tax holiday at present may not be more than Rs.14-15 crores annually.

4.5 In order to assess the impact of the investment allowance and tax holiday on employment, the Committee sponsored a study at the Indian Institute of Management, Ahmedabad, on the basis of data specially collected by the Income-tax Department in respect of 95 selected public limited companies for assessment years 1977-78 and 1978-79. Technical details and fuller results of the study are given in the Appendix to this chapter. Of the 95 companies covered in the study, 90 claimed benefit on account of either or both the provisions. The total benefit claimed amounted to Rs.22.90 crores in 1977-78 and Rs.35.68 crores in 1978-79. The benefit claimed on account of investment allowance amounted to Rs.12.24 crores in 1977-78 and Rs.20.54 crores in 1978-79; that under tax holiday amounted to Rs.10.66 crores in 1977-78 and Rs.15.14 crores in 1978-79. The following table gives the details.

Deduction claimed by 90 selected companies from taxable profit on account of investment allowance and tax holiday

	(Rs. crores)	
Incentive Provision	Assessment year 1977-78	Assessment year 1978-79
Investment Allowance	12.24 (7.07)	20.54 (11.86)
Tax holiday	10.66 (6.16)	15.14 (8.74)

Note: Figures in brackets indicate the tax effect of the deductions.

4.6 Information regarding employment was available only in respect of 60 companies. A striking fact emerging from the study is that total employment in all the 60 companies for which data on employment are available went up from 201,740 to 205,447, that is, by 1.8 per cent. In 40 of these companies employment increased from 127,473 to 133,350, that is, by 4.6 per cent. In 17 companies accounting for 36.5 per cent and 34.1 per cent of the total tax benefits claimed by all the 60 companies in 1977-78 and 1978-79 respectively, employment declined from 68,736 to 66,566 or by 3.2 per cent, while in the remaining three employment remained unchanged. It is possible that in those cases where the employment declined, the decline was due to the new machines being of a labour-displacing type. It is also possible that the decline took place not because the new machines were labour-displacing but because

these were meant for replacement and the extent of replacement was not adequate to maintain employment at the existing level. On the other hand, it might be argued that in the cases where employment actually increased, the increase was not in consonance with the additions to capital, that the new machines were less labour-intensive than older machines. It is obvious that the impact of new machines and equipment on employment cannot be examined adequately without reference to output. Though output data were not available in the study under reference, there is enough evidence, some of which we have presented in the Appendix to Chapter II, that over the past several years employment in the factory sector has not increased *pari passu* with output.

4.7 A tax concession linked to the value of plant and machinery has a *prima facie* bias in favour of capital-intensive technology. This is particularly so when this is coupled with the requirement that the investment allowance reserve must be utilised for purchasing new plant and machinery within ten years. One may argue that the preference of employers for labour-saving machines stems from their anxiety to avoid problems and costs associated with employment of labour. Given the rising costs of employing labour - direct and indirect - coupled with higher productivity of new machines, the preference on the part of investors for mechanisation is already strong. In these circumstances, there is little justification for fiscal concessions which add to this bias.

4.8 Whether the withdrawal of investment allowance will succeed in curbing the tendency to replace labour by machines to any significant extent may be doubted in view of the growing cost of employing labour in the organised sector. Even if fiscal measures do not succeed fully in neutralising the preference for capital-intensive technology, removing from the tax structure *prima facie* biases in favour of capital intensity would be a step in the right direction. We therefore recommend that the investment allowance be discontinued.

4.9 The provision for granting a tax concession for newly established industrial undertakings was intended to stimulate new investment and also to help bring about diversification of the industrial structure. While the development rebate was related to investment in new plant and machinery irrespective of whether the undertaking was new or old, the tax holiday was meant only for new undertakings, even if set up by an existing concern. The provision was introduced first in 1948 for a period of three years but was extended from time to time and has been liberalised in several directions while being tightened up in some other respects. As indicated in the Appendix to Chapter III, at present, the benefit is given in the form of a deduction of 7.5 per cent to corporate taxpayers (6 per cent to others) of the capital employed in a new industrial undertaking including the business of a hotel, cold-storage and ships, for a period of five years (seven years in the case of co-operatives), subject to certain conditions. Where the profits of a new undertaking during any of the first five years, or seven years as the case may be, fall short of 7.5 per cent or 6 per cent as the case may be of the capital employed, the "deficiency" is carried forward for a period of seven years commencing from the end of the initial year. By an amendment made in 1979, industrial undertakings engaged in the production of certain articles specified in the Eleventh Schedule to the Income-tax Act, have been excluded for purposes of the benefit of tax holiday which was earlier available to new

industrial undertakings irrespective of the type of product (subject of course to the other conditions regarding "newness" of the unit, etc.)

4.10 The existing provisions for tax holiday are open to criticism on several counts. First, the way it is designed, viz., by linking it to the capital employed, it induces capital intensity, although, since there is no direct link with investment in plant and machinery, the capital bias resulting from tax holiday would not be as acute as that from investment allowance. Secondly, as all investment in new plant and machinery whether in an existing unit or in a new unit is entitled to investment allowance, the tax holiday provides to new units an additional benefit. In allowing the benefit of tax holiday to new industrial units including those set up by established firms, the intention presumably was to encourage diversification of the industrial structure. However, in practice, any substantial expansion of an existing unit also becomes eligible for being treated as a new unit provided it is set up as a separate unit and the other conditions prescribed in this regard are satisfied¹.

4.11 The scheme of tax holiday in its present form has also given rise to some practical difficulties and extensive litigation. The computation of 'capital employed' is not free from difficulty, and disputes over the question whether, under the existing law, borrowings can be ignored in the computation of capital for the purposes of tax holiday are yet to be resolved.

4.12 The tax holiday provisions are much more advantageous to large units than the small ones not only because the quantum of concession is related to the size of capital employed but also because of the fact that losses and unabsorbed depreciation of a new undertaking can be set off against the profits and gains of existing ones. As a result, where an existing concern has more than one profitable unit, the losses and unabsorbed depreciation of any new unit set up by it serve to reduce the tax liability in respect of profits earned in the other units. This facility is not available to a concern which does not own any other unit except the new one. For all these reasons, we feel that the tax holiday provisions need to be revised in order that the bias in favour of capital intensity is removed and the disadvantage to small units is reduced, if not eliminated.

4.13 In revising the tax holiday provisions, the first step should be to delink the tax holiday from capital employed. That is to say, the exemption should be available in terms of the profits of a new industrial undertaking without any reference to the size of the capital employed. As there will be no provision to carry forward any deficiency under the proposed system, it is suggested that the period of tax holiday may be extended to seven years instead of five years at present. In order that the benefit is not unduly enlarged by the reformulation of its basis, we feel that an appropriate fraction of the profits only may be granted exemption in the said period. The existing differential in favour of co-operatives may be extended under the proposed system also by stipulating that the exemption in their case would be available for a period of 10 years. It will also help simplification as, under the proposed system, the separate provisions in the Income-tax Act relating to tax holiday for new industrial undertakings set up in backward and rural areas (Sec. 80HH and 80HHA) can be merged in the provisions relating to tax holiday. A higher percentage of profits

1. Vide Instruction No.1116 issued by Central Board of Direct Taxes under No. F. No. 178/12/77-I T(AI) dated Nov. 15, 1977.

to be allowed as a deduction may be prescribed for undertakings in backward and rural areas.

4.14 The tax holiday provisions should be redesigned also to ensure that the existing concerns do not enjoy an undue advantage as compared to the new ones. As noted in para 4.12, existing concerns setting up a new unit can set off the losses in the new units against the profits of the old ones thereby reducing their tax liability immediately, whereas a new concern has to wait for profits to accrue in the new undertaking. Further, in the case of an existing concern setting up a new unit, for the purpose of computing the tax holiday profits of the unit for later years, it is sometimes contended that the losses of the unit pertaining to the earlier years, which have been set off against the profits of other units, should be ignored, that is to say, the tax holiday should be allowed with reference to the entire profits of the new unit in the later years without setting off the earlier years' losses. This would confer an unintended benefit in favour of larger firms. In order to avoid this, we recommend that an option should be given to an assessee setting up a new industrial undertaking either to set off the unabsorbed depreciation and losses of the new unit against the profits of its existing units or to avail himself of the benefit of tax holiday for which purpose the eligible profits will be computed after setting off the unabsorbed depreciation and losses of the same for the earlier years.

4.15 The tax holiday is at present granted to the new industrial undertakings provided the articles or things manufactured by it do not come within the non-priority category. Earlier, the concession was available to all new industrial undertakings without any such restriction. The principle of selectivity which has now been introduced in the tax holiday operates in the case of investment allowance also and governed the provisions relating to development rebate when they were in force. We have earlier recommended the withdrawal of the investment allowance. If this is accepted, the Eleventh Schedule to the Income-tax Act would lose its relevance so far as investment allowance is concerned. It remains to be considered whether it should still be applied while granting tax holiday to new industrial undertakings. Since the tax holiday too constitutes a substantial concession with consequent cost to the exchequer, there is some justification for restricting it to priority (or, other than non-priority) industries. However, for reasons stated below we are not in favour of restricting the scope for tax holiday in this way.

4.16 One important reason is that where there is a multiplicity of objectives like acceleration of growth, industrialisation, conservation of resources for essential consumption as well as promotion of employment, formulation of principles or criteria for choosing or excluding industries eligible/ineligible for a particular tax concession gives rise to dilemmas which cannot be resolved easily. This can be seen from the anomalies in the existing list of non-priority industries set out in the Eleventh Schedule to the Income-tax Act. There are a number of items like beer, wine, alcoholic spirit, tobacco and cosmetics which are regarded as non-priority presumably because they come within the category of inessential consumption. However, not all items which would commonly be considered as articles of luxury consumption have been excluded. Instances are motor cars and air-conditioners. On the other hand, articles like electric fans, tooth powder and soap which are no longer regarded as items of luxury come within the Schedule. Then again, it is not articles of consumption which alone figure in the Eleventh Schedule.

Instances are typewriters, calculating machines, cheque writing machines, intercom machines and teleprinters. These articles are widely used in business and industrial organisations for improving production and efficiency, and can hardly be regarded as articles of consumption. Possibly these have been included in the prohibited list on the reasoning that they tend to displace labour. But if this logic was applied consistently, many more items should have figured in the Eleventh Schedule. In view of these difficulties and the need to encourage the growth of industries in general, we recommend that the tax holiday should be available to all new industrial undertakings irrespective of the nature of the articles or things produced. If the production of any article or its domestic use is to be discouraged, it would be desirable to rely on other instruments like excise taxation and licensing.

4.17 Another fiscal measure which, apart from the investment allowance, could be regarded as a source of bias in favour of capital intensity is the Central scheme of investment subsidy for backward areas. Introduced in 1971, the subsidy was given originally at the rate of 10 per cent of the fixed capital investment in selected backward areas, subject generally to a maximum of Rs.5 lakhs to industrial units whose total fixed investment did not exceed Rs.50 lakhs. Units involving total fixed investment exceeding Rs.50 lakhs were eligible for the benefit on the merits of each case. Subsequently, the eligibility limit of investment was raised to Rs.1 crore and the rate of subsidy to 15 per cent subject to a maximum of Rs.15 lakhs. The scheme is administered through the States. The amounts of subsidy disbursed under it in the last few years are as shown in the table below.

Disbursements under Central Investment Subsidy Scheme

<u>Year</u>	<u>Amount (Rupees crores)</u>
1974-75	3.86
1975-76	5.99
1976-77	11.17
1977-78	19.96
1978-79	15.41
1979-80 (upto December 31, 1979)	9.92

While prima facie this scheme too might appear to create a capital bias, considering its primary object, viz. growth of industries in backward areas, we do not think it necessary to suggest any change in its formulation.

4.18 Another concession which can secure sizeable saving in taxation to large companies is the recently introduced provision permitting carry forward and set-off of accumulated losses and unabsorbed depreciation of a sick industrial undertaking in the hands of a company taking over the former under an approved scheme of merger ¹ Approvals for merger accorded under this provision so far show that revenue of the order of Rs.7.5 crores will be forgone in helping the revival of sick units in as few as nine cases. The number of workers of the sick units involved in these cases was about 7,450 which implies a

1. Section 72A of Income-tax Act, 1961.

subsidy of over Rs.10, 000 for the employment of each worker. Although the benefit is allowed subject to the condition that the merger scheme must be approved by the Specified Authority and guidelines have been issued regarding the requirements to be fulfilled in this context, it appears that there are not enough safeguards to ensure that employment in the sick units is adequately protected. There is no doubt a stipulation in the guidelines that for a merger proposal to be eligible for approval, the sick unit must have had at least 100 employees or fixed assets of Rs.50 lakhs. But this by itself affords no protection for the employment jeopardised by the closure of an industrial unit. It may not be possible to ensure that all the employees of an erstwhile sick unit would be employed by its new owners, - in some cases revival of the unit to make it viable might call for some adjustment in employment too. But when such a substantial concession is extended, there should be some obligation on the part of the company benefiting from it to provide employment according to the approved scheme of merger. We, therefore, recommend that the concession under Section 72A of the Income-tax Act should carry an obligation on the part of the company taking over a sick unit to provide employment according to the provisions of the merger scheme for a period of at least five years from the year in which the merger takes place. Failure to honour the obligation should entail proportionate withdrawal of the concession through a recapture provision in the Income-tax Act.

4.19 There are a number of other provisions in the Income-tax Act like exemption of the income of KVIC and cooperatives of certain categories which are designed to help the growth of tiny and cottage sectors and strengthen the economic viability of small enterprises in industry and agriculture. Considering the handicaps which producers in the tiny and cottage sectors suffer from both in the matter of obtaining inputs and marketing their products in competition with established giants, encouragement of this kind is necessary. However, the cost incurred by the community in providing such encouragement should be known in order that a proper evaluation of the cost and benefit from the social angle may be made. At present, there are no reliable data regarding the benefits accruing to cooperatives or other organisations to whom preferential treatment has been accorded in consideration of their role in the promotion of tiny, cottage and village industries. Consequently, no evaluation of these provisions is possible.

4.20 A suggestion which is sometimes made for discouraging capital intensity is to levy a tax on investment in plant and machinery. We do not think this advisable as it might affect the overall quantum of investment in the economy. Higher cost of capital may also divert investment in directions relatively more profitable but of lower social priority. Further, the higher cost of capital may affect the small sector more adversely than the large sector.

4.21 Another measure suggested for discouraging capital-intensive technology and promoting labour-intensive technology is differential taxation of profits arising from capital-intensive and labour-intensive technologies. For instance, tax rates may vary depending upon the labour-intensity of the technology suitably defined such as by ratio of wages to value added or wages to depreciation. It is obvious that, because the level of capital intensity and range of technological choice are different in different industries, it will be inappropriate to subject them to a uniform schedule of differential taxation based upon labour-intensity measured

by the ratio either of wages to value added or of wages to depreciation. On the other hand, different schedules of differential taxation for different industries may become administratively too complicated. It seems that differential taxation of different technologies may be administratively simpler and easier through discriminatory indirect taxation. We shall consider the question in the next chapter.

4.22 A measure to encourage directly larger employment of labour is a wage subsidy which of course would be equivalent to a negative direct tax. Wage subsidies in various forms are currently in operation in U.S.A. and other developed countries.¹ A scheme of incentives for labour-intensive projects has recently been introduced in West Bengal. In this scheme, an industrial unit using labour-intensive technology shall receive a subsidy for employment of additional factory workers for a period of three years from the date of commencement of production in the unit. Based on the ratio of the maximum fixed capital investment of Rs. 70,000 per registered factory worker in a project in a developed area and Rs. 1,00,000 in a backward area, the subsidy is available for additional workers employed. Additionality is measured with reference to the norms implied in the ratios just mentioned. The subsidy is subject to a limit of 15 per cent of the annual wage bill excluding bonus, overtime, ex-gratia and honorarium for the additional factory workers. The subsidy is also subject to a maximum of Rs. 5,00,000 for each of the three years.

4.23 A simple way of providing a subsidy for employment through the tax system is to grant a tax benefit related either to wages or the number of workers or mandays. The tax benefit may be given in the form of tax-credit or as weighted deduction in the computation of taxable income. Another way of subsidising employment is to pay a cash subsidy for every worker employed. The subsidy may be given also in the form of contribution to provident fund of workers or towards their welfare such as housing, medical benefit, etc. A direct subsidy on labour cost related to number of workers or as a fraction of the wage bill has the advantage of simplicity. Unlike the tax credit or weighted deduction from taxable income, a cash subsidy can be availed of by all who employ labour irrespective of whether they are income-tax payers or not and whether they are making profits or not.

4.24 Although it has the merit of simplicity, a general wage subsidy is an expensive instrument. Even if confined to the organised sector, the cost of a general subsidy would be almost prohibitive. The total amount of wages paid in the organised sector during 1976-77 amounted to Rs. 2,270 crores. Hence a 20 per cent subsidy would cost nearly Rs. 500 crores per annum. Much of it would be nothing but windfall to most employers as it would mean a subsidy for existing employment. If the subsidy is to be cost effective, it should be related to additional employment, i.e., increments to the employment in a given year above a base level. Such a marginal employment subsidy would, however, result in discrimination against existing firms even when they are labour-intensive while newly set up undertakings will get substantial benefit even if they happen to be capital-intensive. Moreover, a marginal employment subsidy would have distortionary effects like churning of labour and lead to fragmentation or artificial closure of existing units and diversion of labour from one unit to another within a group of

1. For details, see Daniel S. Hamermesh, "Subsidies for jobs in the Private Sector" in Creating job — Public Employment Programmes and Wage Subsidies (Brookings Institution, 1978), by John Palmer(ed).

units belonging to a company or companies to a new one. Such distortions would be greater if the subsidy is related simply to the number of persons employed, regardless of whether they are regular, casual or part-time. For, the number of workers can then be enlarged by employing more part-time workers while reducing the number of whole-time employees. An employment subsidy related to earnings rather than number of workers would be neutral in some respects since, with a subsidy related to wages, churning of existing workers from one unit to another would not pay. It will, however, not be appropriate from the angle of creating more jobs since with such a subsidy skilled labour would enjoy a premium over unskilled labour and it might lead to employment of existing labour on overtime basis instead of recruitment of new hands.

4.25 Another way of providing an employment subsidy is to relate it to manhours preferably additional manhours over a base period. However, it will require maintenance of a record of hours of working for each worker in all establishments employing labour. It may also lead to employment of existing hands on overtime rather than recruitment of new workers.

4.26 The objections mentioned above would apply equally to a subsidy in the form of an allowance or a weighted deduction for wages paid in the computation of taxable profits. Questions which would need to be answered in framing such a scheme are, should the deduction be allowed for the total amount of wages paid or only for additional employment? How would the additional employment be measured - should it be in terms of number of persons employed or manhours? Should one take into account only the regular workers or also the casual ones? Whether related to number of persons or the amount of wages, there would be distortionary effects. If the concession is related to wages paid to additional hands employed on a regular basis, it may also lead to a reversal of the present trend towards decentralisation of production (the practice of 'farming out' production followed by large scale units) which in a way helps growth of employment in the economy. Even if one dismisses this possibility as remote in view of the manifold advantages which production through the system of farming out confers (circumventing the obligations cast by labour laws, etc.), the problem of calculating the element of additionality from year to year will remain. It has to be considered whether such a benefit is to be given every year for additional labour employed after a given point of time or only in respect of additional labour recruited during the year over the previous year's level. The employment credit in U.S.A. is given as a fixed percentage of each employee's annual wages for all such wages in excess of 102 per cent of the prior year's level upto a specified limit. Such a scheme of subsidy would scarcely be attractive in the Indian situation. If it is to be effective, the subsidy has to be repeated every year for additional employment provided after a base date, which, however, would be highly expensive unless a limit of, say, three or five years is laid down.

4.27 Another way of providing a subsidy for employment is to allow a weighted deduction in the computation of taxable income for contributions made by employers to the provident fund of the employees. At present such contributions are fully deductible, subject to certain limits, from the taxable profits provided the provident funds are recognised for purposes of the Income-tax Act. Provident

funds established under a scheme framed under the Employees' Provident Funds Act, 1952 come within the definition of a 'recognised provident fund'. The employers' contribution, which is generally equal to the employees' own contribution, ranges between $6\frac{1}{4}$ to 8 per cent of the wages paid. A subsidy in the form of weighted deduction for employers' contribution to provident fund would perhaps be free from the risks of misuse as provident fund contributions have to be properly accounted for and deposited regularly with the provident fund authorities. The cost of such weighted deduction, however, would also not be small. Available data show that the total amount of contributions to the employees' provident fund supervised by the Provident Fund Commissioner came to about Rs.530 crores during 1977-78. Assuming that 50 per cent of this (i.e., Rs.265 crores) is contributed by employers, a weighted deduction of 200 per cent (100 per cent being already deductible) would involve a revenue sacrifice of the order of Rs.150 crores a year at current rates of tax. Moreover, the impact of a subsidy like this would be uncertain. First, its efficacy would depend not only on the availability of alternative technologies but also on the growth of new investment in the economy. Subsidies which operate through relative factor costs can be effective in influencing choice of technology only where there is a choice and a new investment decision is being made. Besides, the cost of employment includes not only the wages of labour but also various other costs such as the hazards of industrial disputes, closures, etc. Further, while it may not be easy to reduce employment once it is expanded, there can be no assurance that the subsidy will remain in operation on a continuing basis. Hence, it is doubtful whether a wage subsidy in any of these forms will in fact provide sufficient incentive to expand employment.

4.28 It is also doubtful whether a wage subsidy which for administrative reasons will remain largely confined to the organised sector would be useful. Employment in this sector cannot absorb more than 10 per cent or so of the growing labour force. Hence a wage-subsidy to this sector can at best lead to some diversion of labour from the unorganised to the organised sector. Even this may not happen in the short run if the benefit of a wage subsidy leads merely to a rise in the wages as a result of pressure from the trade unions. In any case, a wage subsidy for the organised sector would amount to underwriting the relatively high wages in this sector. For these reasons, we do not think that direct wage subsidies will be practicable. Their revenue cost may become excessive and their employment benefits may turn out to be small and doubtful.

4.29 The subsidy instrument may, however, be used to a limited extent to protect and promote employment for one rather neglected segment of the work-force, namely, women workers. One reason underlying the reluctance of employers to employ women is the additional cost entailed by payment of leave salary during periods of maternity, requirement for providing facilities like creches for children, etc. To neutralise partly the extra cost of employing women, we recommend that a two-fold measure may be introduced through income-tax, namely, (i) a weighted deduction of 150 per cent of the leave salary paid to women workers in respect of maternity leave (restricted to two occasions) may be allowed in the computation of business income of employers, and (ii) the initial depreciation on the cost of building creches, schools, and maternity homes may be raised from the existing 40 per cent to 50 per cent. The revenue cost of these deductions is unlikely to be of a large order while they may be of some help in arresting the declining trend in the employment of women.

APPENDIX

IMPACT OF INVESTMENT ALLOWANCE AND TAX HOLIDAY ON EMPLOYMENT AND TAX LIABILITY*

A4.1 The study relates to the assessment years 1977-78 and 1978-79. It is based on data relating to 95 companies. These companies are out of 159 companies which were initially selected for the study. The selection was made on the basis of data available in The Bombay Stock Exchange Official Directory (1979). Only those companies were selected which clearly seemed to have benefited considerably from the various fiscal concessions. To illustrate, let us take the case of Company X. It has reported profits before tax of the order of Rs. 1,056 lakhs in 1976-77, Rs. 1,044 lakhs in 1977-78 and Rs. 1,514 lakhs in 1978-79. It has not reported any tax payment in any of these years. Presuming that this is the case of a company benefiting considerably from the various fiscal concessions, it was included in the sample of 159 companies. These companies represent about 29 per cent of the total paid-up capital employed in 1976-77 in the companies covered in The Bombay Stock Exchange Official Directory (1979).

A4.2 The Central Board of Direct Taxes was requested to furnish information in a proforma specially designed for the purpose of this study. As of December 31, 1979 information was received in respect of 95 companies representing about 46 per cent of the total paid up capital employed in all 159 companies originally selected for the study.

A4.3 Data on employment were available in respect of only 60 companies which have claimed benefits on account of investment allowance and/or tax holiday in the assessment years 1977-78 and 1978-79. Table A4.1 presents data on the amount of deductions claimed from taxable profits on account of investment allowance and tax holiday and the number of persons employed by these companies. These data show that the aggregate employment in all the 60 companies went up from 201,740 to 205,447, or by 1.8 per cent. In 40 of these companies, employment went up from 127,473 to 133,350 or by 4.6 per cent. On the other hand in 17 companies, accounting for 36.5 per cent and 34.1 per cent, respectively, of the total tax benefits claimed by all the 60 companies in 1977-78 and 1978-79, employment went down from 68,736 to 66,566, or by 3.2 per cent. In the remaining three companies, employment remained unchanged.

A4.4 The manner in which installation of improved machinery affects employment may be illustrated by the case of Company Y, employing about 8,000 people. The company has launched a modernisation programme, costing about Rs. 11 crores, which is being financed by the Industrial Development Bank of India on concessional terms. In the past few months, the Company has retrenched over 200 workers, and over a period of next 12 months 600 more workers are to be retrenched. The Company has set apart Rs. 1 crore for payment as retrenchment compensation which is tax deductible.

A4.5 Of the 95 companies covered in the study, 90 companies have claimed benefit on account of one or both of the above provisions. The total deductions claimed

*Study prepared for the Committee at the Indian Institute of Management, Ahmedabad.

amounted to Rs.2,290.1 lakhs in 1977-78 and to Rs.3,567.7 lakhs in 1978-79. The deductions claimed on account of investment allowance amounted to only Rs.1,223.8 lakhs in 1977-78, but rose to as much as Rs.2,053.7 lakhs in 1978-79. Table A4.2 presents the details.

A4.6 Over one-half of the tax benefit is claimed by just nine companies. The total tax benefit claimed by them amounted to Rs.1,201.1 lakhs in 1977-78 and to Rs.1,887.8 lakhs in 1978-79. Table A4.3 presents the details. It gives the amount of tax savings as also the extent of reduction in tax liability as a result of the fiscal provisions covered in this study. For instance, Company X-30 has claimed deductions of the order of Rs.238.9 lakhs in its income-tax return for the assessment year 1978-79. In the absence of the provisions relating to investment allowance and tax holiday, its taxable income would have amounted to Rs.267.1 lakhs. Given the tax rate (of 57.75 per cent) applicable to the company, this means that investment allowance and tax holiday have enabled it to reduce its tax liability by 89.4 per cent - from Rs.154.3 lakhs to Rs.16.3 lakhs. Hence, the effective tax incidence on the company works out to just 6.1 per cent.

A4.7 Evidently, a number of companies have benefited from the provisions relating to investment allowance and tax holiday. This can be taken to mean that the provisions have helped investment in the economy. In a majority of cases, the employment has also increased. Whether the increase in employment is in consonance with the increase in investment is difficult to say without a detailed study of relevant plant and machinery. But in a number of cases, in spite of the new investment, the employment declined. At least in some of these cases, the decline in employment was possibly a consequence of the new investment.

Table A.4.1

DEDUCTIONS CLAIMED FROM TAXABLE PROFIT ON ACCOUNT OF INVESTMENT ALLOWANCE AND TAX HOLIDAY AND THE NUMBER OF PERSONS EMPLOYED BY 60 COMPANIES

Company	Deductions claimed in assessment year		Number of employees (regular, casual or badli) at the end of the accounting year relevant to the assessment year	
	1977-78	1978-79	1977-78	1978-79
1	2	3	4	5
X-2	12.5	17.6	215	288
X-3	20.7	39.9	284	320
X-4	5.3	4.4	216	234
X-5	20.0	2.8	961	879
X-8	5.7	18.9	3,320	3,259
X-9	24.5	26.1	1,783	1,862
X-10	7.0	8.0	2,118	2,259
X-12	24.9	79.3	1,033	1,199
X-14	347.3	253.7	20,944	22,227
X-15	4.6	30.3	4,088	4,178
X-16	48.7	45.4	3,653	3,692
X-17	0.8	12.1	2,625	2,582
X-18	44.5	1.7	2,100	2,409

Table A.4.1 (Contd.)

1	2	3	4	5
X-19	137.0	95.2	2,700	2,900
X-20	5.5	1.5	364	351
X-21	23.5	0.3	555	513
X-23	7.4	16.9	304	306
X-26	48.5	7.7	2,340	2,172
X-27	21.7	40.1	4,419	4,283
X-28	1.3	2.3	3,670	3,690
X-30	182.1	238.9	3,436	3,422
X-34	1.0	1.0	749	790
X-35	11.1	6.2	260	300
X-40	41.2	53.2	197	197
X-43	2.9	10.7	2,219	2,234
X-44	130.5	347.7	14,530	14,192
X-45	25.6	53.8	9,180	9,158
X-46	37.0	94.0	1,253	1,262
X-47	39.3	34.0	12,040	11,029
X-48	27.4	31.6	2,415	2,641
X-49	90.4	137.1	7,423	7,354
X-50	88.6	32.0	7,751	8,062
X-52	9.3	16.7	426	478
X-54	0.5	0.6	622	614
X-55	44.7	62.4	800	850
X-56	1.9	32.8	1,317	1,401
X-58	15.7	28.1	19,600	20,000
X-63	31.6	43.1	755	919
X-64	0.1	1.0	1,261	1,308
X-66	50.4	552.9	14,712	15,019
X-68	3.1	6.4	2,336	2,563
X-69	8.9	1.0	2,288	2,348
X-71	69.2	1.5	1,402	1,386
X-72	18.7	14.3	3,060	3,492
X-73	6.3	3.1	1,722	1,764
X-74	28.8	31.8	4,883	4,943
X-75	10.2	6.8	2,732	2,835
X-77	2.7	3.5	2,672	2,692
X-78	8.2	0.9	2,544	2,523
X-79	0.1	0.5	1,165	1,394
X-81	1.0	9.8	1,561	1,608
X-82	3.8	21.6	2,461	2,604
X-84	0.9	2.0	1,502	1,528
X-86	4.7	1.4	3,834	3,834
X-87	3.3	1.9	1,174	1,176
X-88	0.5	0.3	1,677	1,586
X-91	27.9	21.4	1,298	1,283
X-93	5.8	2.3	1,455	1,533
X-94	41.4	47.8	1,836	2,042
X-95	27.8	35.5	1,500	1,500

Table A.4.2

**DEDUCTIONS CLAIMED FROM TAXABLE PROFITS ON ACCOUNT OF
INVESTMENT ALLOWANCE AND TAX HOLIDAY**

Fiscal provision	Deductions claimed (Rs. Lakhs)	
	Assessment	Assessment
	Year 1977-78	Year 1978-79
1	2	3
Investment allowance	1,223.8 (706.7)	2,053.7 (1,186.0)
Tax holiday	1,066.3 (615.8)	1,514.0 (874.3)

Note: Figures in brackets indicate the tax effect of the deductions.

Table A.4.3

**DEDUCTIONS CLAIMED ON ACCOUNT OF INVESTMENT ALLOWANCE AND
TAX HOLIDAY AND TAXABLE INCOME RETURNED BY NINE COMPANIES**

Company	(Amount in lakhs of rupees)			
	Assessment year 1977-78		Assessment year 1978-79	
	Deductions claimed	Taxable income as per return under the head 'Business'	Deductions claimed	Taxable income as per return under the head 'Business'
1	2	3	4	5
X-14	347.3	353.2	253.7	76.7
X-19	137.0	(-) 158.0	95.2	Nil
X-30	182.1	97.1	238.9	28.2
X-39	113.5	52.2	75.8	913.6
X-44	130.5	202.8	347.7	58.1
X-49	90.4	231.5	137.1	305.2
X-51	63.7	45.8	64.3	250.9
X-57	86.2	57.8	122.2	57.8
X-66	50.4	Loss	552.9	Loss

CHAPTER V

INDIRECT TAXES

5.1 The indirect taxes levied by the Central Government consist mainly of excise and customs duties. These tax sources, particularly excise duties, have come to play an increasingly important role in the tax structure as they have been relied upon more and more for meeting the growing revenue and development expenditure of government than are taxes on incomes and wealth. Excise duty is now levied on a wide range of commodities including a residuary head called "All other goods not elsewhere specified" and the revenue collected through Central excise accounts for more than 50 per cent of total tax revenue collected by the Centre. Because of wide coverage and also because of their impact on relative prices of inputs as well as final products, excise duties provide a potent instrument for influencing the pattern of production and the technological choices in the economy. Differential excise taxation of the mechanised and non-mechanised sectors as well as of the organised and decentralised sectors has been used in India extensively to influence technological choices and, thereby, employment. The main focus of the exemptions and concessions provided in excise duty has been to protect and encourage the growth of non-mechanised and small units vis-a-vis those in the organised sector.

5.2 A notable feature of the scheme of Central excise from the angle of employment is the exclusion of products in a number of industries from the levy if no power is used in their manufacture. These include confectionery, food products, vegetable non-essential oils, starch, paper and paper boards, man-made fibres and yarn, cotton yarn, woollen yarn, silk yarn, jute yarn, flax and ramie yarn, mineral fibres and yarn, footwear, steel furniture, coated abrasives and grinding wheels, bolts, nuts and screws and adhesive tapes. In respect of a few other tariff items like cotton fabrics, woollen fabrics and man-made fabrics, such exemption is available not in respect of the items as a whole but only for some sub-items.

5.3 While in respect of the above items, exemption to goods produced in units not using power is granted through suitable provisions in the Central Excises and Salt Act, 1944, similar exemption has been extended by Government to some of the goods falling under a few other items through notification. Examples of such items are metal containers, safes and strong boxes. In some cases exemption based on non-use of power has been granted for selected items within a given industry e.g. french polish coming under paints and varnishes. The list of commodities referred to in this and the preceding paragraph is given in Appendix I to this chapter.

5.4 In the absence of reliable data on output and employment in the non-power sector fully exempt from excise duty, it is not possible to estimate the revenue implications and the impact on employment of such exemptions. The employment potential of the non-power sector is however obvious and its exemption from excise duty should help promote employment.

5.5 The residuary tariff Item 68, i.e. goods not elsewhere specified, which was brought under excise levy in 1975 covers a wide range of goods many of which are produced in villages. Full exemption of duty is available in respect of these goods

provided necessary certificate to that effect is given by the Khadi and Village Industries Commission. Similar concession of excise duty is available in respect of hand-made paper and paper board on production of certificate from the Khadi and Village Industries Commission. To give relief to craftsmen engaged in the manufacture of handicrafts falling under the residuary Item 68 full exemption of duty on handicrafts has also been granted.

5.6 In certain industries, production through manually operated processes is accorded concessional treatment in excise levy, as for example, glassware produced by manually operated press as against glassware produced by semi-automatic or automatic press. The advent of machines has been successfully prevented in some industries through the mechanism of excise taxation. A notable example is the differential taxation of hand-made and machine-made biris; while the hand-made biris are charged to duty at Rs. 3.60 per thousand, biris made with machines are charged at Rs. 8.0 per thousand. This has discouraged the use of machine in biri manufacture.

5.7 The handloom sector of the textile industry enjoys several duty concessions. Grey cotton fabrics manufactured on handlooms have been enjoying full exemption of duty since 1969. Cotton fabrics manufactured on handlooms and processed by a factory owned by a registered handloom cooperative society or any organisation set up or approved by the Government for the purpose of development of handloom enjoy full exemption from duty. Handloom fabrics processed by approved independent processors also enjoy concessional rate of duty at present. To help the handloom sector, full exemption of duty has been granted in respect of single and multiple-fold cotton yarn in straight reel hanks, which is normally used by handlooms. Processed khadi cloth woven on handloom wholly from hand spun cotton yarn or in admixture with similar silk and/or woollen yarn is also enjoying full exemption since 1969. In the following chapter, we shall examine the revenue implications and impact on employment of these exemptions and concessions to the khadi, handloom, and powerloom sectors of the textile industry.

5.8 Apart from the exemption granted to units which do not use power over a wide range as described above, the scheme of excise duties provides for exemption and concession for small producers in a number of industries. Varying criteria have been used for purposes of such exemptions and concessions from time to time. Prior to 1978 Budget, the criteria for identifying units eligible for exemption and/or concession in excise duty were prescribed through formulae based on value (and, in some cases, quantity) of clearances per annum, value of capital investment in plant and machinery, number of workers employed, use of power, or on a combination of two or more of these criteria. The manner in which some of these criteria operated were however found in several cases to come in the way of expansion of output and employment in such units. For instance, where exemption or concession was granted to units having an annual clearance not exceeding a specified limit, the fear of losing the exemption or concession altogether the moment the clearances exceeded the specified limit inhibited larger production, because, in such cases, the concession became inoperative not only for subsequent production, but also, in most cases, in respect of what had already been produced in the same financial year and sold without providing for payment of excise duty. The definition of 'small-scale' in terms of number of workers employed for several industries a unit was considered small

provided the number of workers did not exceed a specified limit acted as a hindrance to more employment, as, where the prescribed maximum was exceeded by employing one worker even for one day the unit lost the duty relief for the entire year. In view of these disadvantages and also the recommendations of the Indirect Taxes Enquiry Committee (Jha Committee) the general scheme of excise relief to small manufacturers was redesigned in 1978.

5.9 Under the scheme now in operation, small manufacturers of specified goods are exempted from duty on clearances valued upto Rs. 5 lakhs in a given year if their clearances in the preceding year did not exceed Rs. 15 lakhs in value. This scheme of general excise concession is currently available to manufacturers of 70 specified commodities (Appendix II). These include medicines, soaps and detergents, paints and varnishes, household electrical goods, steel furniture, metal containers, aerated waters, and vegetable non-essential oils. Unlike in the past, under the present scheme the relief earned by a small manufacturer is not forfeited as soon as the threshold limits of exemption are exceeded. The coverage of the duty relief scheme also has been considerably expanded. The revenue forgone is estimated at Rs. 27.75 crores. It benefits about 22,000 small manufacturing units, of which about 20,000 are totally exempt from duty. The number of workers employed in these units is not readily available.

5.10 Exemption from excise duty is also provided for small producers of commodities coming within the residuary head of the excise tariff (Tariff Item 68). When the levy on goods falling under this head (Item 68) was introduced, in order to give relief to and eliminate excise control over a large number of small manufacturers, the levy was restricted to the 'factory sector', where the term 'factory' had the same meaning as in the Factories Act, 1948. In other words, small manufacturing units employing less than 10 or 20 workers according as whether power was used or not used in any process of manufacture in the factory were kept out of the purview of the new levy. Even within the factory sector, small manufacturing units employing less than 50 or 100 workers according as power was used or not in any process of manufacture were exempted from the levy.

5.11 In view of the criticism that the limits specified for the exemption worked against the growth of employment in the small scale sector, the criterion for exemption based on number of workers was changed in 1977 and a scheme of full exemption based on a two-fold criteria in terms of both 'investment' and 'turnover' was introduced for the power-operated sector of manufacturers producing Item 68 goods. Under this scheme, which was revised in 1979, all small scale manufacturers (identified with reference to the Director General of Technical Development, (DGTD)'s concept, namely, those whose investment on plant and machinery was Rs. 10 lakhs or less) were completely exempted from payment of excise duty in a given year if the value of clearances of all excisable goods in the preceding financial year did not exceed Rs. 30 lakhs. This was a significant improvement over the worker based criterion in that, while the small manufacturer was encouraged by a duty advantage to expand his production to Rs. 30 lakhs, the employment potential of that unit was not restricted in any way.

5.12 In the 1979 Budget, the duty rate applicable to Item 68 was increased from 5% to 8% ad valorem. Having regard to this increase in duty as also the representa-

tions for excluding (a) the value of export goods and (b) goods other than those coming within Item 68, the excise concession scheme was revised. Under the revised scheme, small scale producers whose clearances of Item 68 goods for home consumption in the year preceding the year of assessment did not exceed Rs. 30 lakhs in value were entitled (a) to full duty exemption on their clearances upto Rs. 15 lakhs, and (b) to the concessional rate of duty of 4% ad valorem (as against the statutory rate of 8% ad valorem) on their clearances between Rs. 15 lakhs and Rs. 30 lakhs.

5.13 The relationship of these criteria to employment is discussed in Appendix III to this chapter. From the employment angle, it would appear that the criterion based on the value of clearances is not altogether inappropriate. For, as will be seen from Tables A5.3.2 and A5.3.3 of Appendix III, employment per unit of value added tends to decline with increase in the value of gross output. A similar relationship is noticeable between employment per unit of value added and the value of plant and machinery. It is to be noted however that there is a sharp decline in the employment content per unit of value added for units with value of gross output of more than Rs. 2 lakhs. After Rs. 10 lakhs again there is a marked fall in employment per unit of value added. Thereafter there is no significant change. Hence from the point of view of employment the existing concession based on value of clearances of Rs. 15 lakhs (for Item 68 goods, Rs. 30 lakhs) would appear to be somewhat liberal. We therefore feel that the cut-off point for excise concession to the small scale sector should be re-examined in the light of these facts. It will be seen from para 5.9 that the existing concession based on the value of clearances of Rs. 15 lakhs benefits about 22 thousand small manufacturers of which about 20 thousand have annual clearances not exceeding Rs. 5 lakhs. This would indicate that if the cut-off point is revised downwards it would not cast any undue burden on the administration and the majority of the units currently enjoying the concession would still be covered. As however the data on the basis of which the above conclusions are drawn are aggregative and may not reflect the actual position in this regard in individual industries, it would be desirable to undertake a similar study separately for each industry whose products are liable to excise duty so that cut-off point(s) for excise concession are fixed on a rational basis.

5.14 There are a number of other exemptions under Item 68, which are designed to give relief to labour intensive industries, such as coir, cashew, and tanning. Aluminium utensils, which are made largely by the small scale sector and constitute an item of consumption by the poorer sections of society have also been completely exempted on similar consideration.

5.15 The pattern of excise duty rates and concessions applicable to producers of electronic items like radios, television sets and tape recorders is designed to give relief to small producers as well as consumers in the lower income groups. Radios valued at not more than Rs. 165 per set are free of duty provided the capital investment on plant and machinery in the manufacturing unit is not more than Rs. 10 lakhs. For radios of higher value the duty is levied at graduated rates ranging from 15 to 40 per cent depending on the value and the number of wave bands in the radio. Further, if manufactured by a small unit either on its own behalf or on behalf of a State Electronic Development Corporation the duty is 15 per cent provided the total clearances do not exceed Rs. 1 crore in a year (the concession is applicable to the

first clearance of Rs. 50 lakhs). Television sets are taxed at varying rates; 15 per cent on single channel sets whose value does not exceed Rs. 1600 per set, and 30 per cent on multichannel and more expensive varieties. For tape recorders, the duty is 25 per cent on units of not more than Rs. 500 each, and 40 per cent on those of higher value. For goods manufactured by small scale manufacturers of tape recorders the rates are reduced by 15 per cent for the first clearance of Rs. 25 lakhs if their total clearance in the preceding year did not exceed Rs. 50 lakhs and the value of capital investment on plant and machinery in the manufacturing factory does not exceed Rs. 10 lakhs.

5.16 There are also instances where the more labour intensive sectors within an industry are given preferential treatment. For instance, duty differentials have been used to aid the growth of the non-mechanised sector of the match industry. In 1979, as a further step in this direction, the duty on matches produced by the mechanised sector was increased from Rs. 4.83 per gross box of 50 matches to Rs. 7.20, that on the non-mechanised sector, other than cottage units, including cooperatives, reduced marginally from Rs. 4.52 to Rs. 4.50 and that on cottage sector units reduced from Rs. 3.36 to Rs. 1.60. In a later chapter, we shall discuss the revenue and employment implications of these duty concessions in match industry.

5.17 Another notable duty concession relates to khandsari sugar. The tariff rate applicable to khandsari sugar has been fixed at a lower rate which is about fifty per cent of the tariff rate fixed for Vacuum Pan. Further, specially low compounded rates have been notified for khandsari sugar units which are related to the size of the centrifugal operated with the aid of power and certain other factors. During 1976-77 the average effective rate for V. P. sugar works out to about Rs. 53.45 per quintal. As against this, the average rate for khandsari sugar units working under the normal procedure (1,35,000 qtls. clearance as against 49,32,000 qtls. in the case of compounded levy) works out to about Rs. 40.0 per quintal while for units working under the compounded levy scheme it works out to about Rs. 26.75 per quintal. As a result, most khandsari units opt for the compounded levy rate. The estimated revenue forgone during the year as a result of the lower tariff rate prescribed for khandsari sugar, assuming that there were no compounded rates, works out to about Rs. 6.82 crores. The revenue sacrifice on account of the lower compounded levy is an additional Rs. 6.52 crores.

5.18 In certain industries excise duty concessions are used to encourage not only the non-mechanised sector but also small units using only a small amount of power. An example is footwear. Footwear is normally subjected to duty at the rate of 10 per cent ad valorem. But footwear produced in factories employing less than 50 workers or using not more than 2 H.P. is exempt from excise duty. Footwear so exempted is marked mainly through two large producers under their own brand names. A study conducted by the Central Excise Department showed that in 1975-76, the value of purchases by the two producers of such duty-exempt footwear amounted to a little over Rs. 5 crores, the revenue implication of which is a little over Rs. 50 lakhs.

5.19 While protection is provided to the non-mechanised and small units through wide ranging exemptions and concessions in excise duties, there are certain provisions in the Central excise laws and procedures which may have the result of

neutralising, at least partially, their duty advantage. One important circumstance is that, while for a number of commodities the large producers can set off or obtain relief for duty paid on inputs as a credit against the duty payable on the final product, no such set off or credit can be availed of by producers who are not required to pay excise duty on their final product. This may be better stated by giving the illustration of processed vegetable non-essential oil (VNE oil) which is ordinarily liable to excise duty, but does not attract any duty if used in the manufacture of paints and varnishes, or soap, or artificial or synthetic resins, in the same factory. Even when these inputs are used in another factory, set off is allowed for the duty paid on them against the duty payable on the end products. This concession becomes inoperative where such inputs are used in a factory the final products of which are not required to pay any duty. As a result, the small producers often pay duty on inputs, while the large units enjoy exemption in this respect. Similarly, manufacturers of chinaware who obtain their requirements of processed clay from producers falling within the dutiable sector have to pay duty on processed clay at prescribed rates, whereas a unit which processes its own clay and uses it in the manufacture of chinaware is not liable to pay excise duty on processed clay.

5.20 We have seen that in a large number of cases goods made in the small sector - whether using power or not - are exempt from payment of excise duty. Nevertheless, it should be noted that these goods bear individually certain amount of tax on account of the duty paid on their inputs. Moreover, several of the essential inputs used in the small sector are being manufactured by a few large units which exercise considerable control over their distribution and prices. Hence, there would, in a majority of cases, be ample justification for continuing the taxation of the inputs. In the circumstances the question as to whether any further relief is justified for the goods produced in such sectors should be examined carefully.

5.21 Where, as a result of such a study, it is found that there is a case for further relief in respect of the goods manufactured in a specified exempted sector to neutralise the disadvantage suffered by such goods, it would be possible to do so either by exempting the specified inputs or by extending the facility of receiving dutiable goods from their manufacturer under bond, that is to say, without payment of duty but subject to execution of a bond for their due receipt and maintenance of records. It may be noted that the facility of receiving non-duty paid goods under the cover of a bond can be availed of only by manufacturers licensed under the Central excise law. Very small units, however, are not required to take out any Central excise licence. Hence the disadvantage suffered by such units cannot be neutralised unless such units take out a licence and follow the prescribed procedure.

5.22 In some cases, small scale units buy their inputs from the open market and not directly from the manufacturers. In these circumstances, it is not possible for them to produce evidence of payment of duty on these inputs, resulting in the denial of benefit of proforma credit under Rule 56-A of Central Excise Rules. This hardship can be removed by treating the excisable inputs purchased by small units from the open market as having paid duty at the appropriate rate notionally. A system of giving credit on a notional basis is already in operation e.g. in the grant of drawback for duty paid on the inputs for export manufacturers. Such a procedure is also followed in the matter of excise duty on certain products, e.g. sheets and circles of copper and copper alloys made from (i) old scrap of copper and copper

alloys, (ii) duty paid metal in crude form and (iii) duty paid scrap obtained from virgin copper (vide notification No. 31/65-CE dated 28th February 1965 as amended from time to time). For the purpose of this notification all stocks of copper and copper alloys in crude form in the market on or after 1st August, 1964 are deemed to be duty paid.

5.23 One consequence of the preferential treatment of the small scale sector in the matter of excise duties has been the practice of farming out of production by large producers. As mentioned above shoes manufactured in the exempted sector are purchased on a fairly large scale by established concerns and marketed in the brand names of such concerns. Similarly, electrical goods like domestic appliances which are marketed under the brand names of large concerns are manufactured mostly in the small sector.

5.24 While this practice no doubt helps to promote employment, the margin of profit realised by the large producers simply by lending their brand names seems to be disproportionately high in relation to services rendered in terms of supply of input, quality control and marketing. In the case of shoes, available data show that the mark-up in price goes up to even 40% to 50 per cent in some cases. It may also be relevant to note here that an attempt was made some time ago to levy excise duty on such shoes not manufactured by the marketing concerns themselves. It seems this led to a sharp decline in the purchase by the marketing concerns of shoes made by the small sector and it was withdrawn soon after. It cannot be denied that many of the small units depend heavily on such marketing organisations for marketing their products. Hence, all out efforts should be made to build up adequate marketing organisations for marketing the produce of such small sector.

5.25 While the exemption/concession to the small sector serves to promote labour-intensive techniques and thereby employment, excise duties can be used to influence the choice of labour-intensive techniques in another way. At present, there are a number of processes in almost every industry where machines are being used increasingly in preference to human labour because of various factors (such as high cost of labour etc. in the organised sector) even though there is no demonstrable advantage in terms of cost of production or in quality in using machines. This is applicable particularly to handling of material and packaging of final products. In order to discourage the needless use of machines in processes and activities which can be done manually without affecting the quality of the products, we recommend that a rebate in excise duty leviable on such goods may be allowed if such processes in their manufacture and/or packaging are done without the aid of power. Processes which admit of mechanical as well as manual operation have to be identified industry by industry. One example can be the packaging of soap-cakes and tea.

5.26 An important element in the structure of indirect taxation is the customs duties. The structure of customs duties affects the level as well as composition of production in the economy and influences employment in various ways. Particular reference may be made to the duties on capital goods, which are generally levied at the rate of 40 per cent ad valorem. To the extent plant and machinery imported from abroad are capital intensive, high rates of import duty on capital goods serve to discourage capital-intensive technology.

5.27 The levy of import duty at the rate of 40 per cent on capital goods has been criticised as detrimental to the growth of production in the country. However, while recommending the lower rates of duty for capital goods, the Jha Committee emphasized that scaling down of these duties should be both selective and phased. In the Budget for 1977-78 and thereafter the import duty on certain capital goods have been reduced from 40 to 25 per cent. These include machine tools, testing machines, instrument and electronic equipment and machinery for garment making, leather processing and finishing industry.

5.28 Besides the differential excise duties which the products of small-scale industries and labour-intensive technologies enjoy, they are often given more direct assistance in the form of rebates on sales and loans at subsidised rates of interest. These have all operated in general in the interest of employment as they are intended to. As mentioned earlier, the policy has been in operation ever since the First Year Plan. There is also now available considerable literature on the subject of labour-intensive technology. Nevertheless, no norms or guidelines have as yet emerged to judge the propriety and adequacy of a given level of assistance to a given technology. Evidently, the underlying considerations are complex. In the following we shall briefly formulate what we think should be the approach to this subject.

5.29 Except for a few who would advocate labour-intensive technology in its own right, indeed as a way in which human life should be organized, public policy since the First Plan has generally recognized that enhancing employment by adoption of labour intensive technology can only be a temporary and transitional solution to the problem of unemployment; that to the extent it has to be supported by fiscal means, it involves public cost; and that hence the productive contribution of the employment must be sufficient to reduce substantially the burden of relief and that, to reduce this burden progressively, there has to be continuous improvement of technology. But, beyond these general principles, there has been little concretisation and quantification of the several concepts involved. What, for instance, is the productive contribution of an activity and how does one measure it? What part of the wage is met by the productive effort and how much is relief? What is the public cost of such relief and how does one decide whether its burden is bearable? It may be useful to begin with these elements.

5.30 A given product may be produced by different technologies. For our purpose, the relevant distinction between technologies is based on the amount of human labour used per unit of output; briefly the labour/output or the employment/output ratio. A technology with higher employment/output ratio is called more labour-intensive; for a given output, its employment potential is greater. We shall suppose, though this is not necessarily always true, that a more labour-intensive technology is also less capital-intensive, that is, it has a lower capital/output ratio, that it uses less capital per unit of output. A labour-intensive technology satisfying this condition is advocated on two grounds: it uses more labour which is abundant and it uses less capital which is scarce.

5.31 Productive contribution of any activity is usually measured by the net value added in the process of production and is given by the value of the output minus the value of all material inputs, and depreciation of physical assets. There are complex

problems regarding valuation especially when the analysis is meant to assess the social costs and benefits of an activity. Nevertheless, it is useful to begin with the usual concept of value added wherein the inputs and outputs are valued at market prices.

5.32 If two technologies use more or less the same material inputs to produce a given output, pay the same prices for inputs and receive the same prices for their outputs, the value added per unit of output by the two processes would be about the same. In fact, the net value added per unit of output by the more labour-intensive technology could be somewhat larger for two reasons: if it uses less capital per unit of output, the depreciation allowance would be smaller, and because it uses more human labour per unit of output, it would use less of other energy, such as coal, oil, and electricity. On the other hand, if the labour-intensive technology uses more material inputs per unit of output, as it does in many cases, e.g. in khandsari the value added per unit of output would be smaller. On a balance of these considerations, and for the sake of simplification, let us suppose that the value added per unit of output in two technologies, one less and the other more labour-intensive, is equal.

5.33 The value added in a productive activity, by whatever technology, is shared by two claimants: the worker and the owner of the capital. If the worker is an owner-operator, that is if he owns the means of production, he appropriates the whole of the value added. If the worker does not own the means of production, the division of the value added between the worker and the owner of the means of production is not only a matter of serious political dispute but also a matter of profound debate in economic theory. Whatever the share, and however they are determined, so long as the claims of the two claimants are contained within the quantum of value added, the productive activity remains viable without outside support.

5.34 The problem of viability of labour-intensive technology arises because though the share of wages in value added here may be larger than in a less labour-intensive technology, it has to be divided between the workers and their number per unit of output is much greater in a more labour-intensive technology than in a less labour-intensive technology. Therefore, if the remuneration to capital and labour is not to exceed their joint productive contribution, and even if capital is remunerated at the same uniform rate everywhere, the remuneration per worker, that is the wage rate, in the more labour-intensive technology has to be lower than that in the less labour-intensive technology. Even in an owner-operated enterprise with more labour-intensive technology, where the whole of the value added is appropriated by the owner-operator, the rewards per worker are often much lower than the wage rate in the less labour-intensive technology. The simple fact is that, even though the value added per unit of output might be more or less the same in different technologies, the value added per worker is much smaller in more labour-intensive technologies than in the less labour-intensive technologies. Hence, a more labour-intensive technology can offer only a low reward to the owner-operator or a low wage to the wage-worker.

5.35 Besides their low value added per worker, the enterprises using more labour-intensive technologies suffer from several other disadvantages arising from

market imperfections whose cumulative effect is to reduce the ratio of value added to output and to further depress level of wages they can afford to pay. For instance, not being able to buy their raw materials in bulk, they often buy them at much higher prices; not having easy access to institutional credit, they often borrow at exorbitant interest rates; and, finally, for the marketing of their products, they depend on traders and middle-men who extract large commission. Many goods of mass consumption produced by the more labour-intensive technology are often of lower quality, at least superficially, and suffer from consumer preferences and prejudices. When the ownership or control of these enterprises rests in the hands of trader-moneylender masters, the wage-workers suffer even more. The main rationale for duty differentials is to place a handicap on the less labour-intensive technologies so that the more labour-intensive technologies, in spite of their several handicaps, may survive the competition and maintain their employment at an acceptable wage level. The justification for such intervention derives from the large and growing unemployment and the prohibitive cost of any alternative solution, and from the need to counteract, at least partly, the considerable open and canceled benefits enjoyed by the organised sector.

5.36 Where excise duty at different rates is levied on different sectors of an industry, as for instance in match industry, the intention of protecting the weaker from the stronger sector is obvious and explicit. However, this is not always the case. In fact, in most cases, duties are imposed for purposes of revenue and small units are exempted for reasons of administrative costs of collection. In such cases, the intention to protect the weaker units is not explicit and may be only an ex-post rationalisation of the prevailing duty structure. Even where the intention to protect the weaker units is explicit, no direct payments are made to the smaller or more labour-intensive units and hence no explicit cost to the exchequer is involved. But there is an implicit public cost. Whether explicitly intended or not, the duty differentials do provide protection to units which are either fully exempted or charged at lower rates. The duty differentials provide these units with a margin in which they may pay their workers a somewhat higher wage and/or earn a somewhat higher return on their capital and nevertheless remain competitive with the other units. Presumably, in the absence of the duty differentials, such units would not have survived the competition and the entire production would be taken over in larger, full duty-paying sector. Hence, by supporting the smaller units with duty differentials, the government 'forgoes' a certain revenue. Thus there is implicit in a duty structure with duty differentials a certain public cost and its approximate measure is the 'revenue forgone', being the additional revenue which could be collected if the entire production was done in the full duty-paying sector.

5.37 An objection may be raised to the proposition that, in the absence of the duty differentials, the weaker units would not survive. In the absence of duty differentials, the weaker units could of course survive by accepting lower wages and/or lower returns on capital. But, the fact remains that, with duty differentials, while the consumers pay the same price, whether the product is of the large or the small industry, the government derives a larger revenue per unit of product from one sector and a smaller or no revenue from the other sector. Hence, an 'implicit revenue cost' cannot be denied. It may be said that not in all cases the consumer pays the same price for the products of different sectors of an industry; that often a

lower price is paid for goods of mass consumption produced by the labour-intensive technology. But this is because of the lower quality of the goods in question and not because of the protected sector not taking full advantage of the duty differential.

5.38 On the other hand, it should be emphasised that duty differentials by themselves are not enough to protect the disadvantaged sector. The need to provide this sector with necessary infrastructure to supply raw materials, credit, and technical assistance and to market its products has been emphasised. The cost of such an institutional infrastructure serving the unorganised labour-intensive sector is likely to be larger. Therefore, it is all the more important to ensure more effective coordination than has been so far evident between the fiscal incentives and development of supporting institutions.

5.39 Given a cost, its justification is to be judged by an assessment of the benefits flowing from it. In the present case, the purpose of duty differentials is to protect the disadvantaged sector from competition and thus to protect the employment in it. Employment protected may be measured by two criteria. One is the number of workers employed. A large part of employment in labour intensive industries is part-time. For an assessment of the quantum of employment protected, this must be converted into equivalent full-time employment. Moreover, it should be recognised that the less labour-intensive technology also provides some employment. Hence, the cost should be related, not to total employment in the labour-intensive sector, but to the additional employment that sector provides over and above the employment that the less labour-intensive sector would provide if the same output was produced in that sector. One could then work out the per worker cost of protection of such additional employment.

5.40 The other criterion is the level of wages at which the employment is protected. If we relate the cost to the total wage bill, that would indicate the extent to which the present wages were being protected or 'subsidised'. This of course presumes that the entire duty advantage is utilised to pay the workers a higher wage. This may not be so in most cases. As already noted, in the absence of a supporting infrastructure, the unorganised labour-intensive industry suffers from several disadvantages, such as high prices of raw materials, high rates of interest and low price for its products. All these work to the disadvantage of the owner-operator or wage-worker, whose productivity is already low. In the absence of a supporting infrastructure, a large part of the duty advantage goes to maintain these exploitative elements. In the circumstance, it would be wrong to interpret the entire duty advantage as a 'wage subsidy'. To estimate the element of wage subsidy, if any, one should find the productive contribution of labour, that is to say, the wages that the industry could pay and remain competitive with no duty advantage but also no handicaps other than low-productivity technology. The difference between the actual wage and such productive contribution would indicate the element of wage subsidy present. The balance of duty advantages and other direct assistance goes to the exploitative elements in the system.

5.41 The costs and benefits of prevailing differential excise duties and direct assistance through sale rebates and interest subsidies given to the labour-intensive sector have not been systematically examined along these lines. Unfortunately, relevant data are also wanting. We would like to underscore the paucity of even basic information relevant for decision-making in the first instance and its

evaluation subsequently. How serious this lacuna is can be judged by reading our studies of a few selected industries.

5.42 In the following two chapters we shall present some data on a few industries which we could gather. We should emphasise that it has not been possible for us, in all cases, to check the accuracy and reliability of these data. Our purpose in presenting them here is to indicate and illustrate the nature of monitoring that will be needed, case by case, before the propriety and adequacy of given duty concessions and direct subsidies can be judged.

APPENDIX I

COMMODITIES EXEMPTED FROM CENTRAL EXCISE DUTY IF MANUFACTURED WITHOUT THE AID OF POWER

A. By virtue of the description given in the Central Excise Tariff, the following commodities are exempted from Central Excise duty if manufactured without the aid of power:

Sl. No.	Tariff item No.	Description
1	1	Sugar
2	1A	Confectionery, Cocoa powder and Chocolates
3	1C	Food products
4	12	Vegetable non-essential oils
5	15C	Starch (including dextrine and other forms of modified starch)
6	17	Paper and paper board
7	18A	Cotton yarn
8	18B	Woollen and acrylic spun yarn
9	18C	Silk yarn
10	18D	Jute yarn
11	18E	Non cellulosic spun yarn
12	18F	(i) Flex yarn (ii) Ramie yarn
13	20(2)	Silk embroidery
14	21(2)	Woollen embroidery
15	22(2)	Man made fabrics - embroidery
16	22D	Ready made garments*
17	22F	Mineral fibres and yarn and manufactures therefrom
18	23D	Mosaic tiles*
19	36	Foot wear and parts thereof
20	40	Steel furniture
21	51	Coated abrasives
22	52	Bolts and nuts

* Totally exempt at present, even if manufactured with the aid of power.

B. In addition, the following are exempted or are taxed at a concessional rate under notifications, if, subject to other specified conditions, no process is ordinarily carried out in their manufacture with the aid of power:

Tariff		Description	Other conditions
Sl. No.	Item No.		
1	1(2)	Khandsari sugar	Manufactured without the aid of sulphitation plant by hand driven centrifugal or any other non-power contrivance even if Rab utilised was manufactured with the aid of power.
2	2(3)(ii)	Handmade biris	Concessional rates applicable.
3	14	French polish	No other article under this tariff item is manufactured by the manufacturer.
4	14	Stamping paste	If intended to be used in the stamping of textile fabrics.
5	14	Pigments, colours, paints, enamels, varnishes black and cellulose lacquers.	If the manufacturer or partner has no other factory producing the same with power and where production does not exceed Rs. 2 lakhs.
6	15	Soap	
7	15A, A	Organic surface active agents (other than soap,) surface active preparations and washing preparations whether or not containing soap.	
8	15D	Polishes and creams for footwear, scouring powder and paste	
9	17	Handmade paper/paper board	If certified by Khadi and Village Industries Commission to be hand made paper/board and if the Collector is satisfied that the principal process of lifting of pulp is done by hand in the manufacture of paper/board.

Sl. No.	Tariff Item No.	Description	Other conditions
10	17(2)	Straw board	Concessional rate of duty if manufacture by sun-dry(sundrying) process.
11	17(2)	Mill board	-do-
12	19-I	Processed cotton fabrics	When processed without the aid of power or steam.
13	19-II	Processed Khadi i.e. any cloth woven on handloom in India either wholly from cotton or woollen yarn or in admix- ture of the above with silk and/or woollen yarn hand- spun in India.	Certified as Khadi by K. and V.I. Commission.
14	22A	Jute manufactures	
15	22G	Hand-made floor coverings.	
16	36(2)	Footwear parts	In the manufacture of which only the process of vulcanisation is carried on with the aid of power, other than mechanical power.
17	46	Metal containers	
18	48	Safes, strong boxes, cash boxes, and the like but not includ- ing strong room doors.	
19	68	All products falling under Tariff Item 68	If manufactured without the aid of power.

APPENDIX II

REVENUE IMPLICATION OF EXEMPTION GIVEN TO SMALL UNITS PRODUCING 70 SPECIFIED COMMODITIES (vide para 5.9)

Sl. No.	Tariff Item No.	Commodity	No. of units whose value of clearance		Revenue forgone (Rs. '000)
			Does not exceed Rs. 5 lakhs	Exceeds Rs. 5 lakhs but not Rs. 15 lakhs	
1	2	3	4	5	6
1	1A	Confectionery	51	-	125
2	1B	P or P Foods	658	40	3833
3	1C	Food products	233	6	1263
4	1D	Aerated water	46	9	2,155
5	12	V.N.E. Oils	52	7	1,800
6	14	Paints and Varnishes	959	101	10,083
7	14BB	Sodium Silicate	291	91	15,403
8	14C	Glycerine	8	7	682
9	14D	S.O. Dyestuff	329	83	21,086
10	14DD	O.B. Agents	51	7	3,205
11	14E	P or P Medicines	775	135	19,147
12	14F	Cosmetics and Toilet Preparations	1,158	14	8,525
13	14FF	Tooth-paste and creams	8	-	58
14	14G	Acids	56	4	125
15	14H	Gases	62	41	4,591
16	15	Soap		9	645
17	15AA	O.S.A. Agents	58	1	960
18	15C	Starch	624	38	3,209
19	15D	Polishes and Creams	4	2	124
20	16A	Rubber Products	382	79	18,516
21	16B	Ply-wood	260	35	5,993
22	17	Paper	323	62	10,663
23	22E	Typewriter Ribbons	12	2	235
24	23A	Glass and Glassware	117	34	4,731
25	23B	Chinaware and porcelain-ware	515	33	11,582
26	23C	Asbestos cement products	234	5	3,312
27	28A	Electrical Stampings	290	15	2,328
28	29	I.C. Engines	242	13	1,754
29	29A	Refrigerators and Air-conditioning machinery	270	15	11,072
30	30	Electric motors	876	78	14,039
31	30A	P D Pumps	364	19	1,848
32	30B	Motor starters	60	7	560

1	2	3	4	5	6
33	31	Electric Batteries	389	9	3,769
34	32	Electric bulbs and tubes	433	15	3,368
35	33	Electric fans and regulators	478	1	5,467
36	33B	Electric wires and cables	543	139	13,075
37	33C	Domestic Elec. Appliances	216	28	4,548
38	33D	Office machines	130	13	2,664
39	33E	Elec. supply Meters	1	-	7
40	34	Trailers	1,090	39	3,207
41	34A	Motor vehicles parts	477	20	3,683
42	34B	Works trucks	3	-	62
43	37B	C. Projectors and parts	30	2	638
44	37C	Photographic goods	30	4	255
45	40	Steel furniture	2,808	17	11,970
46	41	Crown corks	20	4	1,472
47	42	P.P. caps all sorts	140	14	4,852
48	44	Watches, clocks and time-pieces	20	12	799
49	45	Weighing machines	8	5	286
50	46	Metal Containers	650	86	12,754
51	48	Safe, strong boxes etc.	145	2	627
52	49	Rolling bearings	148	11	1,904
53	50	Welding Electrodes	19	4	675
54	51	Coated Abrasives and Grinding wheels	53	5	1,280
55	51A	Tools	144	25	2,931
56	52	Bolts and nuts and screws	2,376	52	6,708
57	53	Zip or slide fastners	30	9	1,057
58	54	Pressure cookers	28	7	855
59	55	Vacuum Flasks	12	4	800
60	56	Playing cards	34	4	1,167
61	57	Camphor	5	2	72
62	58	Menthol	76	2	468
63	60	Adhesive tapes all sorts	48	11	1,587
64	61	Elec. Lighting fittings	12	5	266
65	62	Tool Tips	3	-	112
66	63	Wire ropes	9	5	408
67	64	Carbon black	1	1	64
68	65	Rubber processing chemicals	2	-	2
69	66	Permanent magnets	-	-	-
70	22F	Asbestos fibre and yarn	-	-	-
Total			20,018	1,549	2,77,511

APPENDIX III

CRITERION FOR SMALL SCALE/LABOUR-INTENSITY FOR EXCISE RELIEF

A5.3.1 The criteria applied for preferential treatment in excise for the small and non-mechanised sectors are not based on labour intensity as such. Barring a few industries, like footwear and matches, the criteria used mainly are, use or non-use of power and/or value of clearances. For producers of commodities falling under the residuary head (Tariff Item 68) an additional requirement for preferential treatment is that the manufacturing unit should be 'small' as defined by the DGTD i.e. its investment in plant and machinery should not exceed Rs. 10 lakhs (at original cost).

A5.3.2 The criteria for the eligibility of small units for excise concession were rationalised to a great extent in the course of the Budget for 1978, when a general scheme of excise concession based on value of clearances was introduced for 69 specified items in the wake of the recommendations of the Indirect Taxation Enquiry Committee (Jha Committee) to which reference has been made earlier (para 5.8). The criteria now followed for operating this scheme, and also for concessional treatment of small producers of Item 68 commodities, are in many respects superior to the earlier formulae which tended to inhibit the expansion of the small units beyond a specified size in terms of employment, or value of clearances for fear of losing the excise concession altogether. While going some way to meet these deficiencies, the criteria now followed also do not quite meet the requirements of employment promotion. The tests of employment potential or labour-intensity have not been built explicitly into these criteria. Being based on value of clearance (i.e. production), the criteria currently in operation apparently do not distinguish between labour-intensive and capital-intensive techniques. Thus it is possible for a producer to enjoy excise concession in certain industries even if employment provided is low, provided his total clearances do not exceed the specified limit. In some cases the number of jobs created in a small unit are as low as 2 or 3 for an investment of as large as Rs. 8 lakhs. Such instances were brought to the notice of the Committee by the National Small Industries Corporation. These units may yet be eligible for concessional treatment by virtue of their relatively small production. On the other hand, in industries, where the value of output is relatively large because of high input prices, e.g. in electronics, a unit which is otherwise small sometimes fails to obtain any concession, even though it happens to be much more labour-intensive (e.g. producers of electronic items like radios, and radiograms). The deficiencies noted above would be largely removed if the criterion for excise concession was based on value added per worker instead of simply on value of clearances in a year.

A5.3.3 The feasibility of adopting value added as a criterion of excise concession for small producers was considered by the Jha Committee who went into this question at some length. That Committee however felt that "Though the 'Value added' may be an ideal criterion for granting exemption to smaller units, it would not be administratively easy to implement".¹ A criterion based on value added per worker would be still more difficult to operate. Value of clearances in a year was suggested by the Jha Committee as the criterion for purposes of excise concessions the "next best answer". In view of the peculiarities of the methods of production and assembling by smaller units in different industries, the Jha Committee recognised that with

1. Report of the Indirect Taxation Enquiry Committee, Part II, para 12.13.

a clearance based criterion it would be necessary to prescribe differential slabs for groups of industries, depending upon the value added and other relevant factors. However, from the pattern of production of units in the small-scale sector, the Jha Committee found that the average value of output of small-scale units having investment in plant and machinery not exceeding Rs.10 lakhs in 1975-76 was about Rs.12.6 lakhs per annum. After allowing for some growth since 1975-76, the Committee felt that, units with clearances of not more than Rs.15 lakhs per annum, by and large, cover the bulk of the small units. The existing limits of Rs.5 lakhs for 70 specified items and Rs.15 lakhs for goods coming under tariff item 68 for purposes of excise concession are based largely on this consideration.

A5.3.4 In order to see how the existing criteria for excise concessions are working in practice information was collected by the Committee through the Central Excise Department regarding the production, investment and employment of a few units in the large, small and tiny sectors in selected industries coming under excise control. Units with investment in plant and machinery of not more than Rs.1 lakh were treated as tiny, those with such investment between Rs.1 lakh to Rs.10 lakhs as small and those with investment of more than Rs.10 lakhs in plant and machinery were classified as large. Figures of production, fixed assets per worker, employment per Rs.1 million of output, and value added per worker in the large, small and tiny sectors of selected industries as computed from these data are set out in Table A.5.3.1. It will be seen that while generally employment potential is larger in the small and tiny sectors and investment in plant and machinery per worker is also less than in the large sector, there is no consistent pattern. For instance, in the manufacture of motor vehicle parts, employment per Rs.1 million of output in the tiny sector appears to be not very significantly different from that in some units in the large sector. Similarly, there does not appear to be any significant difference in the employment potential of the tiny sector as compared to the small-scale sector in paints and varnishes, cosmetics and toilet preparations and electric fans. In certain industries there are a few large scale units where the employment potential appears to be even larger than that in the small-scale and tiny sectors as for example, in biscuits and paper and paper products. It is however not possible to come to any conclusion from these data as to whether such variations are due to differences in the employment potential of a particular technology or scale as such, since these figures are based on information collected from units actually in operation whose production is subject to many extraneous factors beyond their control such as power shortage, labour trouble etc. A large value of employment per unit of output in a particular case may arise simply because of low utilisation of capacity.

A5.3.5 The Survey of Small-scale Industrial Units conducted by the Reserve Bank for 1976-77 however shows that there is a clear relationship between scale of output/investment and employment. Employment per Rs.1000 of value added in small-scale units classified according to value of gross output, based on the RBI Survey, is shown in Table A5.3.2. Employment per Rs.1000 of value added in the units classified according to size of investment in plant and machinery is shown in Table A5.3.3. As may be seen from col. 7 of Table A5.3.2, employment per unit of value added declines almost uniformly with increase in the scale of output. The decline is most marked as soon as the output exceeds Rs.5,000, suggesting that employment potential is maximum in the very small cottage units. There is a marked decline again when

the output goes above Rs.2 lakhs. Thereafter also the employment content per unit of output continues to decline but the change is not very significant. A similar relationship can be noticed between size of investment in plant and machinery and employment. While there is almost uniform decline in employment (barring some small variations) as the size of investment in plant and machinery increases, there is a marked difference in the employment potential as the investment in plant and machinery exceeds Rs.1 lakh. Although the RBI Survey covers only units assisted by banks, these data would seem to show that labour intensity measured in terms of employment per given unit of output varies inversely with value of plant and machinery and production. Hence a clearance based criterion designed to favour units with clearances below a specified limit would by and large seem to serve the objective of promoting employment. These data further show that for units with clearances of more than Rs.2 lakhs there is a sharp drop in employment potential and there is no appreciable change thereafter. Hence, from the point of view of employment, there is not much to be gained by giving concession to units with output of more than Rs.2 lakhs or plant and machinery of more than Rs.1 lakh.



		L			S			T	
	Unit	1976-77	1977-78	Unit	1976-77	1977-78	Unit	1976-77	1977-78
1. MOTOR VEHICLE PARTS									
1. Total Production (Value in Rs. '000)	A	82623	83258	C	67	65	D	720	986
	B	50078	58291						
2. Fixed Assets (P&M) per worker (Rs. '000)	A	21.23	23.61	C	6.74	6.00	D	7.29	4.73
	B	39.92	28.82						
3. Capital/Output ratio	A	0.471	0.522	C	3.927	4.045	D	0.070	0.053
	B	0.364	0.254						
4. Employment per Rs. 1 million of output	A	22	22	C	N.A.	N.A.	D	9	11
	B	9	8						
5. Value added per worker (Rs. '000)	A	19.632	18.777	C	N.A.	N.A.	D	71.658	69.08
	B	48.262	50.934						
6. Wages/Value added	A	1.119	1.180	C	31.028	27.96	D	0.220	0.147
	B	0.291	0.314						
2. I.C. ENGINES									
1. Total Production (Value in Rs. '000)	A	123681	122347	C	4089	5805	D	504	N.A.
	B	28705	41381						
2. Fixed Assets(P&M) per worker (Rs. '000)	A	29.38	36.14	C	4.48	4.48	D	3.89	3.89
	B	23.05	23.95						
3. Capital/output ratio	A	0.300	0.328	C	0.100	0.070	D	0.140	-
	B	0.354	0.245						
4. Employment per Rs.1 million of output	A	10	9	C	22	15	D	35	N.A.
	B	14	10						
5. Value added per worker (Rs. '000)	A	31.142	37.230	C	27.592	24.630	D	7.951	N.A.
	B	32.129	44.179						
6. Wages/value added	A	0.914	0.873	C	0.298	0.376	D	0.619	-
	B	0.325	0.282						
3. PAINTS & VARNISHES									
1. Total Production (value in Rs. '000)	A	42771	50405	C	4600	6500	H	329	459
	B	197826	232963	D	2983	4250	I	733	772
				E	4719	4040	J	874	904
				F	4461	6357	K	2038	2152
				G	17198	19260			

Table A. 5.3.1 (Contd.)

	Unit	L		Unit	S		Unit	T	
		1976-77	1977-78		1976-77	1977-78		1976-77	1977-78
2. Fixed Assets (P&M) per worker (Rs. '000)	A	9.09	15.40	C	17.17	8.47	H	8.25	6.60
	B	N.A.	N.A.	D	9.38	9.17	I	5.29	5.29
				E	6.55	6.86	J	7.50	6.00
				F	6.25	8.06	K	5.91	7.00
				G	4.73	5.30			
3. Capital/output ratio	A	0.096	0.135	C	0.054	0.044	H	0.100	0.072
	B	0.097	0.101	D	0.101	0.078	I	0.051	0.048
				E	0.061	0.071	J	0.034	0.033
				F	0.053	0.045	K	0.032	0.036
				G	0.041	0.039			
4. Employment per Rs. 1 million of output	A	10	8	C	7	5	H	12.16	10.89
	B	N.A.	N.A.	D	10	8	I	9.55	9.07
				E	9.32	10.40	J	4.58	5.53
				F	12.55	8.34	K	5.40	5.11
				G	8.72	7.27			
5. Value added per worker (Rs. '000)	A	12.882	21.997	C	49.17	N.A.	H	48.25	35.00
	B	N.A.	N.A.	D	N.A.	32.861	I	35.57	40.86
				E	45.16	45.81	J	57.25	34.00
				F	21.63	31.13	K	N.A.	N.A.
				G	51.45	58.81			
6. Wages/value added	A	0.154	1.003	C	0.230	0.153	H	0.116	0.159
	B	0.297	0.257	D	-	0.059	I	0.123	0.095
				E	0.371	0.414	J	0.123	0.213
				F	0.302	0.285	K	N.A.	N.A.
				G	0.279	0.296			

4. ORGANIC DYESTUFFS

1. Total Production (value in Rs. '000)	A	37591	N.A.	B	791	721
				C	644	1007
				D	5600	5700
				E	458	2095
				F	N.A.	1166
				G	4216	3454
				H	800	1693
2. Fixed Assets (P&M) per worker (Rs. '000)	A	39.87	60.29	B	39.76	46.00
				C	67.50	67.50
				D	35.05	39.47
				E	43.64	N.A.
				F	50.00	30.65
				G	N.A.	N.A.
				H	N.A.	N.A.

Table A. 5. 3. 1 (Contd.)

	L			S			T		
	Unit	1976-77	1977-78	Unit	1976-77	1977-78	Unit	1976-77	1977-78
3. Capital/output ratio	A	0.098	N.A.	B	0.349	0.397			
				C	0.629	0.402			
				D	0.119	0.132			
				E	N.A.	0.206			
				F	N.A.	0.815			
				G	0.072	0.093			
				H	0.502	0.383			
				4. Employment per Rs. 1 million of output	A	3.94	N.A.	B	21.49
C	9.32	5.96							
D	3.39	3.33							
E	24.02	8.11							
F	N.A.	26.59							
G	16.61	20.27							
H	28.42	14.41							
5. Value added per worker (Rs. '000)	A	54.92	N.A.					B	10.29
				C	7.00	20.17			
				D	47.37	47.37			
				E	20.36	64.41			
				F	N.A.	N.A.			
				G	N.A.	N.A.			
				H	N.A.	N.A.			
				6. Wages/value added	A	0.193	N.A.	B	0.403
C	0.554	0.411							
D	0.289	0.300							
E	0.109	0.071							
F	N.A.	N.A.							
G	N.A.	N.A.							
H	N.A.	N.A.							

5. METAL CONTAINERS (STEEL)

1. Total Production (Value in Rs. '000)	A	6784	3570	B	5250	5914
2. Fixed Assets (P&M) per worker (Rs. '000)	A	9.87	11.36	B	7.64	10.36
3. Capital/output ratio	A	0.177	N.A.	B	0.20	0.025
4. Employment per Rs. 1 million of output	A	22.41	36.97	B	2.67	2.37
5. Value added per worker (Rs. '000)	A	4.72	4.98	B	N.A.	N.A.
6. Wages/value added	A	0.599	N.A.	B	N.A.	N.A.

Table A. 5.3.1 (Contd.)

		L			S			T	
	Unit	1976-77	1977-78	Unit	1976-77	1977-78	Unit	1976-77	1977-78
5A. METAL CONTAINERS (TIN)									
1. Total Production (Value in Rs. '000)	A	66061	96063	C	4393	4366			
	B	4249	2863	D	7930	8708			
2. Fixed Assets (P&M) per worker (Rs. '000)	A	29.31	30.11	C	4.02	3.27			
	B	36.09	37.31	D	2.88	5.91			
3. Capital/output ratio	A	0.279	0.192	C	0.085	0.086			
	B	0.518	0.769	D	0.040	0.090			
4. Employment per Rs. 1 million of output	A	9.52	6.38	C	9.33	11.00			
	B	14.36	20.61	D	14.25	14.58			
5. Value added per worker (Rs. '000)	A	22.18	48.47	C	N.A.	N.A.			
	B	19.76	11.49	D	62.40	61.71			
6. Wages/value added	A	N.A.	0.369	C	0.184	0.237			
	B	0.475	N.A.	D	N.A.	N.A.			
6. FOOTWEAR									
1. Total Production (Value in Rs. '000)	A	68214	74373	E	2000	2567	F	210	151
	B	57306	69078						
	C	7010	7770						
	D	2133	2175						
2. Fixed Assets (P&M) per worker (Rs. '000)	A	1.46	1.28	E	1.29	1.32	F	0.29	0.12
	B	4.05	4.16						
	C	30.39	16.66						
	D	7.20	6.97						
3. Capital/output ratio	A	0.028	0.023	E	0.068	0.050	F	0.024	0.013
	B	0.148	0.143						
	C	0.154	0.154						
	D	0.462	0.453						
4. Employment per Rs. 1 million of output	A	19	18	E	53	41	F	81	113
	B	36	34						
	C	14	14						
	D	64	72						
5. Value added per worker (Rs. '000)	A	18.36	19.98	E	N.A.	6.54	F	8.24	5.35
	B	8.48	8.60						
	C	0.48	0.37						
	D	N.A.	N.A.						
6. Wages/value added	A	N.A.	N.A.	E	N.A.	N.A.	F	0.221	0.286
	B	N.A.	N.A.						
	C	0.307	N.A.						
	D	N.A.	N.A.						

Table A. 5.3.1 (Contd.)

		L			S			T	
	Unit	1976-77	1977-78	Unit	1976-77	1977-78	Unit	1976-77	1977-78
7. <u>PACKAGE TEA</u>									
1. Total Production (Value in Rs. '000)	A	109293	108063	F	1252	1209			
	B	285900	316300	G	851	850			
	C	4901.85	5100.25	H	2888	3573			
	D	11811	17175						
	E	5726	8637						
2. Fixed Assets (P&M) per worker (Rs. '000)	A	11.85	12.26	F	19.28	32.86			
	B	17.11	17.49	G	31.25	31.25			
	C	N.A.	N.A.	H	9.63	9.63			
	D	48.50	42.81						
	E	24.20	25.38						
3. Capital/output ratio	A	0.114	0.114	F	0.108	0.190			
	B	0.033	0.030	G	0.294	0.294			
	C	N.A.	N.A.	H	0.117	0.094			
	D	0.238	0.174						
	E	0.211	0.147						
4. Employment per Rs. 1 million of output	A	9.662	9.263	F	5.00	5.00			
	B	6.380	5.640	G	9.00	9.00			
	C	N.A.	N.A.	H	12.00	12.00			
	D	4.00	4.00						
	E	9.00	6.00						
5. Value added per worker (Rs. '000)	A	0.24	0.30	F	30.886	32.577			
	B	7.51	3.31	G	23.500	18.375			
	C	N.A.	N.A.	H	18.857	N.A.			
	D	132.532	153.376						
	E	60.12	70.86						
6. Wages/value added	A	0.532	0.453	F	0.080	0.087			
	B	N.A.	N.A.	G	0.147	0.150			
	C	N.A.	N.A.	H	0.142	N.A.			
	D	0.340	0.293						
	E	0.363	0.402						
8. <u>BISCUITS</u>									
1. Total Production (Value in Rs. '000)	A	138226	139003	C	1237	1218			
	B	31131	30243						
2. Fixed Assets (P&M) per worker (Rs. '000)	A	6.95	7.85	C	1.31	1.38			
	B	1.37	1.36						
3. Capital/output ratio	A	0.084	0.094	C	0.042	0.044			
	B	0.055	0.057						
4. Employment per Rs. 1 million of output	A	99.30	99.43	C	42.66	43.50			
	B	40.96	41.32						

Table A. 5.3.1 (Contd.)

	Unit	L		Unit	S		Unit	T	
		1976-77	1977-78		1976-77	1977-78		1976-77	1977-78
5. Value added per worker (Rs. '000)	A	25.28	23.00	C	0.55	0.39			
	B	12.63	11.60						
6. Wages/value added	A	0.730	0.809	C	N.A.	N.A.			
	B	0.581	0.778						
9. PAPER & PAPER PRODUCTS									
1. Total Production (Value in Rs. '000)	A	108959	124957	C	1060	1114	E	758	794
	B	6128	5389	D	8329	17766			
2. Fixed Assets (P&M) per worker (Rs. '000)	A	75.60	64.26	C	4.24	4.39	E	4.30	5.70
	B	11.44	10.71	D	11.06	11.88			
3. Capital/output ratio	A	1.071	0.939	C	0.340	0.323	E	0.064	0.371
	B	0.067	0.071	D	0.096	0.045			
4. Employment per Rs. 1 million of output	A	14.00	14.00	C	N.A.	N.A.	E	13.00	12.00
	B	17.95	21.34	D	3.00	3.00			
5. Value added per worker (Rs. '000)	A	41.477	32.903	C	6.920	7.710	E	25.546	17.287
	B	24.910	16.920	D	22.786	37.583			
6. Wages/value added	A	0.270	0.291	C	0.409	0.489	E	0.116	0.152
	B	0.390	0.579	D	0.268	0.208			
10. COSMETICS & TOILET PREPARATIONS									
1. Total Production (Value in Rs. '000)	A	28687	75358	C	242	219	D	1469	1621
	B	3465	3712				E	1048	1294
							F	829	1117
2. Fixed Assets (P&M) per worker (Rs. '000)	A	N.A.	N.A.	C	41.00	26.80	D	4.89	4.89
	B	N.A.	N.A.				E	1.78	4.50
							F	1.80	4.20
3. Capital/output ratio	A	N.A.	N.A.	C	0.847	0.616	D	0.060	0.055
	B	N.A.	N.A.				E	0.015	0.021
							F	0.010	0.018
4. Employment per Rs. 1 million of output	A	3.00	2.00	C	20.00	22.00	D	12.00	11.00
	B	7.00	8.00				E	8.00	6.00
							F	6.00	4.00
5. Value added per worker (Rs. '000)	A	N.A.	14.767	C	35.485	30.785	D	25.238	27.861
	B	35.836	30.749				E	53.678	59.681
							F	73.350	97.870
6. Wages/value added	A	N.A.	N.A.	C	0.039	0.050	D	0.250	0.251
	B	0.079	0.079				E	0.091	0.075
							F	0.013	0.011

Table A. 5. 3. 1 (Contd.)

		L			S			T	
	Unit	1976-77	1977-78	Unit	1976-77	1977-78	Unit	1976-77	1977-78
11. <u>ELECTRIC MOTORS</u>									
1. Total Production (Value in Rs. '000)	A	34928	42628	C	1744	1053	F	425	305
	B	39873	49982	D	3854	6475	G	85	252
				E	3594	8812	H	236	506
2. Fixed Assets (P&M) per worker (Rs. '000)	A	35.085	37.37	C	13.98	19.27	F	1.17	0.93
	B	11.410	10.02	D	16.32	14.46	G	2.35	2.19
				E	6.33	3.71	H	5.75	4.90
3. Capital/output ratio	A	0.312	0.279	C	0.172	0.284	F	0.081	0.091
	B	0.150	0.120	D	0.131	0.078	G	N.A.	0.183
				E	0.132	0.054	H	0.293	0.205
4. Employment per Rs. 1 million of output	A	9.00	7.00	C	36.00	43.00	F	71.00	98.00
	B	13.00	12.00	D	8.00	5.00	G	N.A.	83.00
				E	20.00	14.00	H	50.00	41.00
5. Value added per worker (Rs. '000)	A	54.84	59.07	C	4.53	11.133	F	3.600	2.166
	B	28.32	30.00	D	32.65	35.94	G	N.A.	4.619
				E	3.354	10.249	H	9.862	13.678
6. Wages/value added	A	0.325	0.324	C	N.A.	N.A.	F	0.470	N.A.
	B	0.189	0.169	D	0.117	0.140	G	N.A.	0.109
				E	0.567	0.446	H	0.323	0.187
12. <u>ELECTRIC LIGHTING BULBS</u>									
1. Total Production (Value in Rs. '000)	A	75230	75140				B	134	163
							C	249	299
2. Fixed Assets (P&M) per worker (Rs. '000)	A	30.16	32.09				B	2.60	1.50
							C	2.70	3.40
3. Capital/output ratio	A	0.461	0.479				B	0.097	0.072
							C	0.246	0.248
4. Employment per Rs. 1 million of output	A	15.00	15.00				B	97.00	74.00
							C	92.00	60.00
5. Value added per worker (Rs. '000)	A	21.43	23.81				B	17.80	9.75
							C	1.83	3.33
6. Wages/value added	A	0.684	0.682				B	0.084	0.149
							C	0.476	0.440
13. <u>ELECTRIC FANS</u>									
1. Total Production (Value in Rs. '000)	A	N.A.	36.00	B	386	696	C	1244	1511
							D	1221	1522

Table A. 5. 3. 1 (Contd.)

	Unit	L		Unit	S		Unit	T	
		1976-77	1977-78		1976-77	1977-78		1976-77	1977-78
2. Fixed Assets (P&M) per worker (Rs. '000)	A	N.A.	N.A.	B	3.961	4.478	C	7.00	6.250
							D	2.947	2.947
3. Capital/output ratio	A	N.A.	N.A.	B	0.267	0.148	C	0.045	0.033
							D	0.046	0.033
4. Employment per Rs. 1 million of output	A	N.A.	22.00	B	65.00	32.86	C	6.60	5.00
							D	16.00	13.00
5. Value added per worker (Rs. '000)	A	N.A.	15.587	B	0.923	0.310	C	25.12	25.00
							D	8.11	N.A.
6. Wages/value added	A	N.A.	N.A.	B	N.A.	N.A.	C	N.A.	N.A.
							D	0.256	0.293

14. STEEL FURNITURE

1. Total Production (Value in Rs. '000)	A	3956	2610	B	1474	1471	D	275	350
				C	4987	11218	E	559	668
2. Fixed Assets (P&M) per worker (Rs. '000)	A	9.341	9.271	B	5.766	5.371	D	2.500	2.500
				C	5.291	4.142	E	2.214	2.000
3. Capital/output ratio	A	0.312	0.473	B	0.117	0.128	D	0.091	0.072
				C	0.026	0.013	E	0.111	0.084
4. Employment per Rs. 1 million of output	A	33.37	N.A.	B	20.00	24.00	D	36.00	28.00
				C	4.00	3.00	E	50.00	42.00
5. Value added per worker (Rs. '000)	A	N.A.	N.A.	B	15.833	11.228	D	11.50	24.50
				C	59.58	100.00	E	4.035	4.071
6. Wages/value added	A	0.958	2.917	B	0.234	N.A.	D	0.313	0.180
				C	0.075	0.050	E	0.905	N.A.

15. TYRES & TUBES

1. Total Production (Value in Rs. '000)	A	74004	67774
	B	31482	47687
	C	320900	299300
2. Fixed Assets (P&B) per worker (Rs. '000)	A	32.98	40.69
	B	5.45	4.36
	C	377.22	372.59
3. Capital/output ratio	A	0.114	0.159
	B	0.081	0.072
	C	0.294	0.329
4. Employment per Rs. 1 million of output	A	7.54	8.79
	B	14.90	16.52
	C	4.91	5.55

Table A. 5.3.1 (Contd.)

	Unit	L		Unit	S		Unit	T	
		1976-77	1977-78		1976-77	1977-78		1976-77	1977-78
5. Value added per worker (Rs. '000)	A	2.61	3.81						
	B	25.90	23.17						
	C	31.22	32.77						
6. Wages/value added	A	3.142	1.503						
	B	0.213	0.273						
	C	0.750	0.741						

16. ELECTRIC WIRES & CABLES

1. Total Production (Value in Rs. '000)	A	7438	7408	B	14502	12511	E	396	386
				C	515	550			
				D	10400	14065			
2. Fixed Assets (P&M) per worker (Rs. '000)	A	65.97	58.30	B	13.30	15.65	E	3.83	3.86
				C	37.00	37.10			
				D	12.51	12.16			
3. Capital/output ratio	A	0.674	0.677	B	0.021	0.029	E	0.058	0.070
				C	0.718	0.673			
				D	0.085	0.063			
4. Employment per Rs. 1 million of output	A	10	12	B	5	2	E	15	18
				C	19	18			
				D	7	5			
5. Value added per worker (Rs. '000)	A	11.131	18.581	B	165.716	510.142	E	10.00	8.00
				C	10.498	4.547			
				D	42.802	58.190			
6. Wages/value added	A	0.469	0.277	B	0.025	0.008	E	0.284	0.341
				C	0.695	1.489			
				D	0.133	0.106			

17. PLASTICS

1. Total Production (Value in Rs. '000)	A	89824	85795	E	3060	3584	I	N.A.	182
	B	14719	14776	F	2676	6132			
	C	10394	7937	G	N.A.	471			
	D	6061	5546	H	3915	6175			
2. Fixed Assets (P&M) per worker (Rs. '000)	A	57.45	64.70	E	14.82	15.20	I	25.00	16.67
	B	71.12	80.90	F	32.43	26.19			
	C	23.98	24.28	G	N.A.	37.50			
	D	121.48	115.91	H	38.15	39.68			
3. Capital/output ratio	A	0.142	0.167	E	0.218	0.191	I	4.469	0.274
	B	0.440	0.438	F	0.254	0.111			
	C	0.277	0.382	G	N.A.	0.637			
	D	0.421	0.460	H	N.A.	0.275			

Table A. 5.3.1 (Contd.)

		L			S			T	
		Unit	1976-77		1977-78	Unit		1976-77	1977-78
4. Employment per Rs. 1 million of output	A	2.47	2.58	E	14.71	12.56	I	N.A.	16.00
	B	6.18	5.41	F	7.85	4.24			
	C	11.55	15.75	G	N.A.	16.99			
	D	3.00	3.00	H	7.00	4.00			
5. Value added per worker (Rs. '000)	A	4.14	0.32	E	38.24	42.42	I	N.A.	41.73
	B	28.01	35.75	F	39.29	82.23			
	C	17.53	15.61	G	N.A.	18.75			
	D	46.518	48.173	H	58.62	90.24			
6. Wages/value added	A	N.A.	N.A.	E	0.443	0.452	I	0.198	0.080
	B	0.240	0.269	F	0.161	0.112			
	C	0.368	0.393	G	N.A.	0.133			
	D	0.165	0.164	H	N.A.	N.A.			

Source: Prepared from data collected through Central Excise Department.

L = Large Scale Sector; S = Small Scale Sector; T = Tiny Sector

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Table A.5.3.2

Employment per unit of Value Added in Small Scale Industries - Classified according to Value of Gross Output

Units Classified by Value of Gross Output	Average per unit				Number of Employ- ees	Employment per Rs. 1000 of Value Added (No) (Col. 6 + Col. 5/'000)
	Value of Gross Out- put	All materials consumed	Deprecia- tion during the year	Value Added /Col. 2- (Col. 3+ Col. 4)/		
(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)		
1	2	3	4	5	6	7
Upto 5000	2821	1509	540	772	2.48	3.212
5000 -- 10,000	7296	4204	461	2631	2.20	0.836
10,000 - 20,000	14834	9679	811	4344	2.95	0.679
20,000 - 50,000	31292	19359	1931	10002	3.85	0.385
50,000 - 1 lakh	71007	41125	4131	25751	8.04	0.312
1 lakh - 2 lakhs	146272	96471	5159	44642	13.50	0.302
2 lakhs - 5 lakhs	334823	217982	10312	106529	15.14	0.142
5 lakhs - 10 lakhs	717193	503096	14293	199804	22.91	0.115
10 lakhs - 20 lakhs	1419816	968506	23954	427356	35.96	0.084
20 lakhs - 50 lakhs	3137624	2307807	42614	787203	64.36	0.082
Above 50 lakhs	11370057	8147020	74200	3148837	226.61	0.072
Total	437127	326612	6888	103627	18.08	0.174

/Based on Survey of Small Scale Industrial Units 1977 - Statistical Report Volume I - Reserve Bank of India, Department of Statistics, Bombay/.

Table A.5.3.3

Employment per unit of Value Added in the Small Scale Industries - Classified According to Original Value of Plant and Machinery

Units Cla. sified by Original Value of Plant and Machinery	Average per unit				Number of Employees	Employment per Rs. 1,000 of Value Add- ed (Col. 6 + Col. 5/'000)
	Value of gross output	All Materi- als consu- med	Deprecia- tion during the year	Value added /Col. 2-(Col. 3+Col. 4)-3/		
(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)		
1	2	3	4	5	6	7
Upto - 1000	98592	77505	494	20593	3.23	0.157
1000 - 10,000	129300	95587	1188	32525	1.94	0.060
10,000 - 20,000	212714	160730	2241	49743	1.93	0.039
20,000 - 50,000	393765	305549	5002	83214	2.17	0.026
50,000 - 1 lakh	683314	505248	9873	168193	3.04	0.018
1 lakh - 2 lakhs	1502148	997356	19122	485670	4.96	0.010
2 lakhs - 5 lakhs	2060986	1459587	42655	558744	6.41	0.011
5 lakhs - 10 lakhs	3705013	2672151	86879	945983	12.61	0.013
Above 10 lakhs	8056465	5679072	209152	2168241	23.84	0.011
Total	437127	326612	6888	103627	3.87	0.037

/Based on Survey of Small-Scale Industrial Units 1977 - Statistical Report Volume I - Reserve Bank of India, Department of Statistics, Bombay/.

CHAPTER VI

TEXTILE INDUSTRY

6.1 Textile industry is divided into three main stages or processes viz., (a) spinning, (b) weaving, and (c) processing. Spinning is done in independent spinning mills or in composite mills which produce both yarn and fabrics. Besides, there is hand-spinning in the khadi sector. Weaving is done on handlooms, independent powerlooms, and in composite mills. Processing is done by hand or by power. Hand-processing is done in independent small units. Power processing is done by independent power processing units or in composite mills processing their own fabrics.

6.2 As of December 1978, there were 357 spinning mills and 219 composite mills so far as cotton textiles are concerned. The total installed capacity was about 20 million spindles and 208,000 looms. Besides, there were 3.8 million handlooms, 3.5 lakh authorised powerlooms (of which 2.1 lakh worked on cotton and 1.4 lakh on artsilk) and another one lakh unauthorised powerlooms. The total output of cotton cloth, during 1977-78, amounted to about 7,000 million metres, of which about 3,200 million metres came from the mill sector, 2,000 from the handloom sector, and 1,800 million metres from the powerloom sector. In addition, about 572 lakh metres were produced in the khadi sector. By means of ceilings on the weaving capacity in mills, reservation of certain varieties for the handloom and powerloom sectors, duty exemption and concessions, and other financial assistance through sales rebates, interest subsidies, etc. the textile policy, since the beginning of the First Five Year Plan, is directed to promotion of employment in the more labour-intensive handloom and khadi sectors. The policy in relation to the powerloom still remains somewhat unclear. The policy in relation to handloom and khadi has succeeded eminently. The cloth output of the mill sector has remained more or less stuck at 4,000 million metres and indeed might have declined a little. On the other hand, the output of cloth in the decentralised sectors of handloom, powerloom and khadi, has gone up from about 1,150 million metres in 1948 to about 3,800 million metres in 1977-78. Expansion of the mill sector has been mainly in spinning needed to meet the growing demand for yarn in the handloom and powerloom sectors. The output of mill-yarn increased from under 6,00,000 tonnes in 1951 to over 8,50,000 tonnes in 1977-78. There has also taken place considerable expansion of processing of cloth in the mills.

6.3 In Table 6.1 are given certain data showing the progress of textile mill industry and expansion or otherwise of employment in it. In columns 2-4 are given output of yarn and cloth and employment. Beginning with 1956, employment data are available separately for (i) spinning and preparatory operations, (ii) weaving and preparatory operations, and (iii) all other operations which are largely cloth processing. Based on these, in columns 5-7 are given (i) employment in spinning per thousand tonnes of yarn; (ii) employment in weaving per million metres of cloth, and (iii) employment in other operations, mainly processing, per million metres of cloth. The figures are instructive.

Table 6. 1

Progress of Textile Mill Industry

Year	Output of Yarn in thousand tonnes	Output of cloth in billion metres	Total (000) labour engaged	Emp. in spinning per thousand tonnes of yarn	Emp. in weaving per million metres of cloth	Emp. in other operations per million metres of cloth
1	2	3	4	5	6	7
1951	591. 431	3. 727	715	-	-	-
1956	758. 558	4. 852	807	431. 37	60. 59	38. 33
1957	807. 451	4. 862	813	409. 93	60. 26	38. 87
1958	764. 488	4. 505	767	405. 50	61. 04	40. 40
1959	781. 464	4. 504	763	394. 13	60. 17	40. 85
1960	787. 959	4. 616	772	394. 69	59. 14	40. 73
1961	862. 294	4. 701	798	368. 78	59. 77	41. 26
1962	859. 563	4. 560	798	374. 61	60. 52	43. 86
1963	892. 574	4. 423	804	314. 12	61. 72	46. 58
1964	964. 811	4. 653	832	348. 25	60. 81	45. 77
1965	939. 236	4. 587	822	349. 22	60. 38	47. 30
1966	900. 980	4. 239	788	342. 96	62. 75	50. 26
1967	896. 417	4. 097	789	350. 28	63. 94	51. 98
1968	960. 907	4. 366	760	312. 21	57. 49	47. 87
1969	951. 066	4. 168	740	303. 87	59. 02	49. 18
1970	964. 756	4. 157	749	301. 63	59. 66	50. 52
1971	880. 990	3. 957	719	311. 01	60. 15	52. 32
1972	972. 299	4. 245	762	298. 26	59. 13	52. 06
1973	998. 195	4. 169	784	298. 54	62. 61	55. 17
1974	1006. 986	4. 316	787	292. 95	59. 78	54. 22
1975	989. 310	4. 032	780	303. 24	63. 00	56. 05
1976	1005. 930	3. 881	760	292. 27	63. 39	56. 69
1977	846. 070	3. 223	829	367. 58	80. 66	80. 04
1978	911. 620	3. 251	846	352. 12	80. 28	80. 28

Source: Indian Textile Bulletin.

6.4 The output and employment data for the last two years, 1977 and 1978, appear doubtful; while the output of both yarn and cloth has recorded a decline, the employment is shown to have gone up. These data need to be checked. For our immediate purpose, we may keep the data for 1977 and 1978 out of consideration. It will then be noticed that the output of cloth has declined from 4.852 billion metres in 1956 to 3.881 billion metres in 1976. Fortunately, total employment in weaving and preparatory operations had declined, no more than proportionately and has stayed more or less around 60 workers per million metres of cloth. However, there has been a certain expansion of employment in other operations which are mainly processing of cloth; employment in these operations has increased from under 40 workers per million metres of cloth in 1956 to 56.69 workers in 1976. This is due to much greater processing now being done in the mills. The growth has been steady with an annual rate of about 2.0 per cent. (An exponential growth curve fitted gives an excellent fit with $r^2 = 0.94518$ and annual rate of growth of 1.999 per cent). On the other hand, though the output of yarn increased from 758 thousand tonnes in 1956 to over 1,000 thousand tonnes in 1976, the employment in spinning and preparatory operations did not expand pari passu: employment in spinning per thousand tonnes of yarn declined from over 400 workers in 1956 to under 300 workers in 1976. The decline is steady with annual rate of decline of almost 2.0 per cent. (An exponential growth curve fitted to these data also gives an excellent fit with $r^2 = 0.94219$ and annual rate of decline of 1.970).

6.5 Presumably, the decline in employment in spinning and preparatory operations has been due to gradual replacement of old machinery by improved, labour-saving machinery. Hence, we thought it worthwhile verifying this independently by a cross-sectional study of different spinning mills. The study was entrusted to the Gokhale Institute of Politics and Economics, Pune. Technical details of the study as also the statistical results are presented in an appendix to this chapter. (Appendix I).

6.6 The study is based on the statistical returns which all textile mills make to the Textile Commissioner. There are four returns as follows: (A) Form CST-A (Annual): Installed capacity in mills, (B) Form CST-B (Monthly): Labour and machinery engaged, (C) Form CST-C (Monthly): Yarn production, packing, consumption, and deliveries, (D) Form CST-D (Monthly): Cloth production, packing and deliveries. In 1978, these returns were received from 348 spinning and 283 composite mills. Returns from the 348 spinning mills were scrutinised and a number of them were rejected because of incomplete data. Returns from 204 spinning mills were admitted for the purpose of the study. In Table 6.2, a classification of these mills by state and management (Government, co-operative, and others) is given.

Table 6. 2

Classification of 204 Spinning Mills by State and Management Type in 1978

State	Government	Cooperative	Others	Total
Andhra Pradesh	1	3	7	11
Assam	1	-	1	2
Bihar	1	-	2	3
Gujarat (Ahmedabad)	-	-	2	2
Rest of Gujarat	-	1	7	8
Haryana	-	-	5	5
Karnataka	-	1	8	9
Kerala	4	1	8	13
Madhya Pradesh	1	-	2	3
Bombay City	-	-	1	1
Rest of Maharashtra	1	9	4	14
Orissa	1	-	2	3
Punjab	1	-	3	4
Rajasthan	-	1	2	3
Coimbatore	1	1	43	45
Rest of Tamilnadu	5	7	42	54
Rest of Uttar Pradesh *	4	1	5	10
West Bengal	2	1	9	12
Pondicherry	-	-	1	1
Goa	-	-	1	1
Total	23	26	155	204

*Excluding Kanpur which has no spinning mills

6.7 From the monthly returns B and C, the following four measures were computed for each mill: (i) average number of days the mill worked per month in each shift; (ii) average daily employment in spinning and preparatory operations in each shift; (iii) average number of spindles engaged daily (cotton + non-cotton + mixed yarn) in each shift; and (iv) average monthly production of yarn (cotton+non-cotton+mixed) in kgs. Making use of these measures, the following three ratios were worked out: R_1 = production of yarn per worker, per day, per shift; R_2 = production of yarn per 1,000 spindles, per day, per shift; and R_3 = number of workers employed per 1,000 spindles, per day, per shift. All the three ratios show wide variation between the mills. For instance, R_1 ranges from 1.6931 kg. to 59.3234 kg.; R_2 ranges from 11.0174 kg. to 418.2911 kg.; and R_3 ranges from 0.9439 to 26.4394. In Table 6.3 is given a distribution of the 204 spinning mills according to these ratios.

Table 6.3

Classification of 204 spinning mills by ratios

(R₁ : production per worker per shift in kg.R₂ : production per 1,000 spindles per shift in kg.R₃ : workers per 1,000 spindles)

	R ₁	No. of mills	R ₂	No. of mills	R ₃	No. of mills
Under	5.0	11	-	-	- 2.5	14
-	7.5	27	- 30.0	14	- 5.0	53
-	10.0	47	- 40.0	23	- 7.5	69
-	12.5	38	- 50.0	26	-10.0	27
-	15.0	26	- 60.0	26	-12.5	23
-	17.5	20	- 70.0	25	-15.0	10
-	20.0	10	- 80.0	14	Above	8
-	22.5	6	- 90.0	13		
-	25.0	6	-100.0	13		
Above		13	-150.0	30		
			Above	20		
		204		204		204

6.8 The annual form A is an inventory of machines in considerable detail. A number of machines are distinguished into categories such as manual/auto, conventional/high speed, etc. We were able to identify 20 such items among the spinning and related machines. The expectation now is that the proportion of the improved machines would be greater in mills with higher R₁ and R₂ ratios indicating higher labour and spindle-productivity or in mills with lower R₃ indicating lower labour-intensity. A detailed examination of the data shows that by and large no such relationship exists. It seems therefore that though improved machinery would presumably lead to a reduction in employment for a given output, there are a number of other circumstances affecting the labour productivity in spinning mills.

6.9 Let us now turn to the structure of excise duties on textiles. As already mentioned, the duty structure is deliberately arranged so as to protect and promote labour-intensive technology and processes. The existing pattern of excise levy on textiles is that duty is first charged at yarn stage and then again at fabric stage. The fabric duty is also normally payable at two stages a part of it at the grey fabric stage and another part when the fabric is processed. The processing duty has been fixed with relation to major processes only and minor processes like stentering, singeing, plain calendering etc., which are primarily undertaken only to give finish to grey or already processed cloth, are normally not taken into account for the purpose of excise duty.

6.10 Composite mills generally pay both the grey stage as well as the processing stage duty together at the time of taking clearance of the cloth from the factory. In most of the cases they pay the yarn duty also at the same time.

6.11 Powerloom units usually purchase duty-paid yarn. In addition, powerloom units other than those authorised by the Textile Commissioner pay a small compounded duty on the basis of looms installed which absolves them from paying any further duty on the grey fabrics made by them. At present the rate of compounded duty is Rs. 100 per loom per quarter. Authorised powerlooms are free from this duty at grey fabric stage. If these fabrics are taken to a processing house, working with the aid of power or steam, for processing, they become liable to processing duty.

6.12 The handloom sector does not pay any yarn duty. Further, complete exemption from grey stage fabric duty has been given to handloom fabrics. If any of these fabrics are taken for processing, with the aid of power, processing duty becomes payable but at a lower rate. In actual practice only a very small percentage of the fabrics made on handlooms is processed with the aid of power or steam. The bulk of these fabrics are processed manually. Cotton yarn produced without the aid of power does not attract any excise duty. Similarly no excise duty is leviable on hand-spun woollen yarn.

6.13 Silk yarn, woollen yarn as well as acrylic yarn not containing more than 1/6th by weight of non-cellulosic fibre is exempt from excise duty. Production of silk yarn is highly labour-intensive and a number of processes are conducted manually. Again, silk yarn is used by number of handloom weavers for production of sarees. In the case of acrylic yarn also the main usage is in the hand-knitting industry. Similar conditions also apply in the case of woollen yarn.

6.14 Cellulosic spun yarn as well as cotton yarn not containing more than 1/6th by weight of non-cellulosic fibre, in plain (straight) reel hanks, has been exempted from the whole of the duty of excise leviable thereon. Yarn in this form is generally used by the handloom industry. In some parts of the country handlooms also use cross-reel hank yarn. Hence, full exemption has been provided to such yarn if its count does not exceed 20. For counts above 20 the rate of basic excise duty has been reduced by 30 paise per kg. in favour of handlooms.

6.15 There are a number of poor people engaged in reeling of yarn from one form to another for convenience in use. With a view to providing relief to such people it has been provided that no further duty will be leviable on yarn which has already paid duty and is subsequently subjected to beaming, warping, wrapping, winding, or reeling whether with or without the aid of power. Similarly if hank yarn is subsequently subjected to processes like bleaching, dyeing or mercerising with or without the aid of power no further duty is leviable.

6.16 Nylon yarn for use in the manufacture of fishing nets has been exempted from the major part of excise duty, as a measure of help to fishermen.

6.17 No excise duty is leviable at weaving stage on majority of cotton fabrics, all varieties of woollen fabrics, and all varieties of man-made fabrics when produced on handlooms or powerlooms and cleared in unprocessed form. Composite cotton mills pay duty on their unprocessed fabrics at the same ad valorem rate as applicable to similar processed fabrics. This differential has encouraged production in the decentralised sector. Unprocessed woollen fabrics and unprocessed man-made fabrics enjoy unconditional exemption. Even in respect of such specialised cotton fabrics as canvas, duck, filter cloth etc. manufactured on powerlooms, a rate differential of 6% ad valorem has been provided over composite mills.

6.18 Silk fabrics are completely exempted from excise duty. A large number of weavers are engaged in the production of silk sarees.

6.19 As a part of 1979 Budget, excise duty has been levied at 30% ad valorem on machine-made carpets as a measure of protection to hand-made carpet industry. Full exemption has been provided to carpets manufactured on manually operated looms and by manually operated implements used independently by hand such as hooking guns, tufting guns, and knitting guns.

6.20 Hand processing industry is highly labour-intensive. It was given full exemption from excise duty as a part of the 1977 Budget.

6.21 There are concessional rates of duty when cotton fabrics are processed with the aid of power by independent processors. At processing stage there are further rate differentials in favour of handloom fabrics and powerloom fabrics. When handloom fabrics are processed with the aid of power by a factory owned by a registered handloom cooperative society or any organisation set up or approved by Government for the purpose of development of handlooms, such fabrics have been exempted from the whole of the duty of excise leviable thereon. There are concessional rates when handloom fabrics are processed by an approved independent processor. Concessional rates of duty are also applicable to the powerloom fabrics at processing stage. For fine and superfine processed white powerloom fabrics the rate of duty has been further reduced as such white fabrics are used in substantial quantities by the hand printing industry. (Details are given in Appendix II to this chapter).

6.22 Cotton hosiery fabric enjoys full exemption from excise duty. Hosiery articles as such fall within the purview of the Item No. 68 of Central Excise Tariff but there are liberal exemptions to the small-scale sector under that item which provide enough protection to labour-intensive units. No excise duty is also leviable on embroidery in the manufacture of which no power is used. Further, embroidery fabrics manufactured on machines other than vertical type automatic shuttle embroidery machines are exempt from embroidery stage duty; for the latter, compounded levy procedure has been extended which simplifies the levy and reduces the incidence of duty. Readymade garments are also exempted from excise duty.

6.23 Cotton fabrics, woollen fabrics and man-made fabrics are covered by the scheme under which State Governments do not levy sales-tax on the sale of these goods and in lieu of sales-tax, additional excise duties are collected in the same manner as duties under the Central Excises and Salt Act, 1944. This arrangement while assuring collections for the State Governments, has freed a large number of retailers from government control. It has facilitated retail sale of fabrics which provide employment to a very large number of people.

6.24 Thus excise levies have been deliberately used for encouraging labour intensive techniques of production in different sectors of the textile industry.

6.25 Incidence of excise duties on cotton fabrics including the yarn and processing duties produced by different sectors of textile industry worked out on the basis of certain assumptions explained in para 6.26 is indicated below:

(paise per sq. metre)

Description	Handloom fabric			Powerloom fabric			Mill fabric		
	fabric	Yarn+Fab.	= Total	Yarn+Fab.	+Cess	= Total	Yarn+Fab.	+Cess	= Total
1. Unprocessed or hand-processed fabrics									
(i) Superfine	Nil	23.8+Nil	= 23.8	23.8+54.1+1.9	=	79.8			
(ii) Fine	Nil	30.7+Nil	= 30.7	30.7+82.4+1.9	=	115.0			
(iii) Medium A	Nil	12.0+Nil	= 12.0	12.0+ 8.0+1.9	=	21.9			
(iv) Medium B	Nil	5.6+Nil	= 5.6	5.6+ 6.2+1.9	=	13.7			
(v) Coarse	Nil	4.5+Nil	= 4.5	4.5+ 8.5+1.9	=	14.9			
2. Power processed fabrics									
(i) Superfine:									
White	28.6	23.8+45.3	= 69.1	23.8+67.6+1.9	=	93.3			
Others	51.6	23.8+49.4	= 73.2						
(ii) Fine:									
White	20.3	30.7+67.9	= 98.6	30.7+103.1+1.9	=	135.7			
Others	36.6	30.7+74.1	=104.8						
(iii) Medium A	2.7	12.0+ 9.5	= 21.5	12.0+15.0+1.9	=	28.9			
(iv) Medium B	1.6	5.6+ 4.9	= 10.5	5.6+ 7.8+1.9	=	15.3			
(v) Coarse	5.7	4.5+10.0	= 14.5	4.5+15.9+1.9	=	22.3			

6.26 In arriving at the above incidence of duty, the following assumptions are made:

(i) The incidence of yarn duty on fine and superfine powerloom and mill fabrics as worked out by the Federation of All India Cotton Powerloom Associations during November 1977 was 26.7 and 20.7 paise per sq. metre respectively. After adding special excise duty and additional excise duty (under October 1978 Ordinance) the incidence comes to 30.7 and 23.8 paise per sq. metre respectively.

(ii) The incidence of yarn duty on Coarse, Medium B and Medium A powerloom and mill fabrics as worked out earlier was 3.9, 4.9 and 10.4 paise per sq. metre respectively. After adding special excise duty and additional excise duty (under October 1978 Ordinance) the incidence comes to 4.5, 5.6 and 12.0 paise per sq. metre respectively.

(iii) The prices of handloom fabrics as reported by the Department of Textiles in 1977 were as under:

Medium B	Rs. 1.75 per sq. metre
Medium A	Rs. 3.00 "
Fine	Rs. 3.66 "
Superfine	Rs. 5.15 "

(iv) Prices of powerloom fabrics as reported by the Federation of All India Cotton Powerloom Associations were Rs. 5.55 per sq. metre for fine and Rs. 3.70 per sq. metre for super fine fabrics. The prices of comparable mill fabrics were reported as Rs. 6.18 and Rs. 4.05 per sq. metre respectively.

(v) The prices of mill fabrics as worked out earlier were Rs. 4.75 per Sq. metre for Coarse, Rs. 3.50 for Medium B and Rs. 4.50 for Medium A fabrics.

(vi) For Coarse, Medium B and Medium A powerloom fabrics, the prices have been assumed as 10% less than those of corresponding mill fabrics.

(vii) For Coarse handloom fabrics the price of Rs. 4.28 per sq. metre (same as for powerloom fabrics) has been assumed.

(viii) The prices of grey fabrics have been assumed as about 20% less than those of processed fabrics.

6.27 Production of cotton fabrics in different weaving sectors in 1978-79 was as under (provisional estimates):

	(Million metres)			Total
	Mill sector	Powerloom	Handloom	
Superfine	167	195	103	465
Fine	94	301	191	586
Medium-A	1623	696	445	2764
Medium-B	889	347	753	1989
Coarse	418	229	553	1200
Total	3191	1768	2045	7004

6.28 Based on production, the duty advantage enjoyed in one year by handlooms and powerlooms had their fabrics been subjected to duty at the rates applicable to similar mill fabrics, are estimated to be Rs. 47.44 crores and Rs. 27.27 crores respectively. Detailed working of these estimates and the underlying assumptions are given in Appendix III to this chapter.

6.29 In addition to these excise exemptions and concessions handloom cloth marketed through approved agencies is given substantial rebates on retail sales. Thus: (i) in some states, a 5 per cent rebate is given on handloom cloth of all varieties and throughout the year; (ii) in several states for specified periods of about 2-3 months, a 10 per cent rebate is given on handloom cloth sometimes only of selected varieties; (iii) in all states, for one month in a year, a special rebate of 20 per cent is given half of which is shared by the Centre; further, (iv) in National exhibitions, etc., a special rebate of 20 per cent is given half of which is shared by the Centre. The total amount of rebate on sale of handloom fabrics as given in the Report of the Committee on Controls and Subsidies came to Rs. 11 crores for 1977-78. It appears that this figure relates only to the amount given by the Centre. The total amount of subsidy given in this form would thus be considerably higher.

6.30 Besides the excise duty exemptions and concessions and the rebate on sales, the handloom industry also gets interest subsidy upto 3 per cent on loans to handloom cooperatives to ensure credit at 6.5 per cent. The borrowings from the central financing institutions by primary weavers' cooperatives in 1975-76 amounted to about Rs.17.7 crores. Hence, the interest subsidy would amount to about Rs.50 lakhs annually.

6.31 The total financial assistance given directly or indirectly to the powerloom and handloom industries in 1978-79 is estimated as under:

	(Rs. crores)	
	<u>Powerloom</u>	<u>Handloom</u>
Duty advantage over mills	27.27	47.44
Rebates on sales	-	11.00
Interest subsidy	-	0.50
Total	<u>27.27</u>	<u>58.94</u>

6.32 An appraisal of the benefits of this assistance requires technical data relating to the capital-labour substitution between different techniques and also data on the cost of production of a unit of output, say 1000 metres of cloth of given quality, by different techniques. In spite of the fact that a deliberate policy of protecting the handloom industry from the competition of the mill industry has been pursued over the past 30 years, data on the subject is very inadequate. The following data are taken from a study on the choice of technology prepared by the Technology Analysis Unit in the Project Appraisal Division of the Planning Commission.

6.33 The sources of data are the National Textile Corporation, the Office of the Textile Commissioner, Bombay, the Powerloom Weavers' Association, the Social Work and Research Centre, Tilonia and the office of the Development Commissioner, Handlooms. The basic parameters for four technologies are as under:

	<u>Mill</u>	<u>Powerloom</u>	<u>Improved handloom</u>	<u>Handloom</u>
Fixed capital cost (Rs)	20,000	4,000	1,300	-
Annual production per loom (metres)	25,000	10,000	6,000	-
Average wage rate (Rs. per person per day)	26.00	7.00	7.00	3.00

The cost of a semi-automatic loom with accessories has been taken for the mill sector; that of a second-hand loom with electric motor and other accessories for the power loom; and that of a loom and accessories for the improved handloom as supplied by the SWRC, Tilonia. The capital cost of handloom is taken as negligible at the margin presumably on grounds that because a large number of handlooms are at present not fully used, considerable expansion of production in the handloom sector can be undertaken without much additional capital cost.

6.34 The three important ratios, namely, fixed capital/ output, fixed capital/ employment, and employment/output for the production of grey cloth of 20x20 and 40x40 counts by the four techniques are taken as under:-

	<u>Mill</u>	<u>Powerloom</u>	<u>Improved handloom</u>	<u>Handloom</u>
<u>20x20 count</u>				
Fixed capital/output (Rs. per 1000 metres)	700	350	220	Neg.
Fixed capital/employment (Rs. per person-day)	33.30	14.00	2.44	Neg.
Employment/output(person- days per 1000 metres)	21	25	90	230
<u>40x40 count</u>				
Fixed capital/output (Rs. per 1000 metres)	800	400	N.A.	Neg.
Fixed capital/employment (Rs per person-day)	33.30	13.80	N.A.	Neg.
Employment/output(person- days per 1000 metres)	24	29	N.A.	380

6.35 The operating costs per 1000 metres of 20x20 and 40x40 counts by the four techniques are as under:

	<u>Mill</u>	<u>powerloom</u>	<u>Improved handloom</u>	<u>Handloom</u>
<u>20x20 count</u>				
		(Rs per 1000 metres)		
Yarn	2,150	2,165	2,076	2,076
Other materials	286	195	-	-
Depreciation and Interest	261	159	101	37
Wages/Salaries	550	178	630	690
Total	<u>3,247</u>	<u>2,697</u>	<u>2,807</u>	<u>2,803</u>
<u>40x40 count</u>				
Yarn	1,980	1,990	N.A.	2,000
Other materials	297	169	N.A.	-
Depreciation and Interest	286	166	N.A.	41
Wages/ salaries	630	205	N.A.	1,137
Total	<u>3,193</u>	<u>2,530</u>	<u>N.A.</u>	<u>3,178</u>

6.36 Yarn costs are the actual costs of production supplied by the NTC, discounted for the lower quality supplied to powerlooms and handlooms. Winding and packing costs are included. Depreciation is computed at 10% per annum. Interest on fixed and working capital is calculated at 16% per annum for all the techniques. The requirement of working capital is assumed to be for two months for mill and powerloom sectors and one month for handloom sector.

6.37 On the above reckoning the cost of production of mill cloth is the highest and that of the powerloom the lowest. The difference between the two is wider in the case of 40x40 count cloth. The cost of production of handloom cloth is lower than that of the mill cloth and the difference is large in respect of 20x20 cloth. In the production of 20x20 cloth, the improved handloom does not show much cost advantage over the ordinary handloom; data on the improved handloom is not available for 40x40 cloth.

6.38 We wish to emphasise that we do not take these cost estimates as conclusive. We consider them to be plausible but nevertheless hypothetical and we are using them only to illustrate the kind of considerations which should govern decisions regarding the level of tax protection which may be given to the labour-intensive technology in any industry.

6.39 On the basis of the above cost estimates, it is obvious that the powerloom industry needs no tax protection vis-a-vis the mill industry. Its capital costs, in terms of depreciation and interest per unit of output, are only about 60 per cent of that of the mill industry. It employs only about 20 per cent more labour per unit of output than in the mill industry but it pays less than 30 per cent of the wage in the mill industry. Consequently, its total costs per unit are only about 80 per cent of the same in mill industry. In fact, judged by the cost estimates in the Planning Commission study, the powerloom could pay the same wage as in the mill, namely Rs. 26 per day, and still remain competitive with the mill sector. Hence, there is no justification on any ground, certainly not on the ground of greater employment, to give any duty advantage to the powerloom sector. Nevertheless, as already noted, while the mill industry pays duty on yarn and fabric both, the powerloom pays only the duty on yarn but no duty on unprocessed fabrics. As a result, the present tax structure enhances the advantage which powerloom industry has over the mill industry. In the following are given the production costs plus the excise duties of unprocessed fabrics in different sectors. In the above study the cost estimates are given per linear metre. Presumably, the width is the same for all the techniques. In the absence of knowledge of what the width is, the excise duties per square metre are applied to linear metres of mill cloth.

Production costs inclusive of Excise Duties

	(Rs. per 1,000 metres)	
	20x20	40x40
Mill	3,247 + 137 = 3,384	3,193 + 1,150 = 4,343
Powerloom	2,697 + 56 = 2,753	2,530 + 307 = 2,837
Improved handloom	2,807 + 0 = 2,807	N. A.
Handloom	2,803 + 0 = 2,803	3,178 + 0 = 3,178

6.40 Because of the large advantage which the powerlooms now enjoy over the mills, the number of powerlooms has rapidly increased recently. By the end of 1977, there were 3.5 lakh authorised powerlooms out of which 2.1 lakh worked on cotton and 1.4 lakh on art silk. Besides there were estimated to be almost one lakh unauthorised powerlooms. Unable to control them, government has taken a liberal attitude to authorize them. Earlier, installations with not more than 4

powerlooms were exempt from excise duty on their fabrics at grey stage. This limit is now removed. Thus the powerlooms enjoy a double advantage over the mills; First, in the interest of handlooms, the weaving capacity in the mills is frozen without an effective control of the expansion of powerlooms. Second, the powerlooms enjoy a duty advantage over the mills. Hence, the powerlooms are now posing a serious threat to the handlooms. Taking note of this, the High Powered Study Team on Problems of Handloom Industry (1973-74) under the Chairmanship of Shri B. Sivaraman recommended that the excise differential between powerlooms and handlooms should be of the same order as between composite mills and handlooms; in other words, that powerlooms should not have much duty advantage over mills. But the recommendation was not accepted by the Government. In 1979-80, the production of cotton fabrics on powerlooms was estimated to be 1,800 million metres as compared to 2,076 million metres on handlooms.

6.41 The improved handloom does not appear to have a cost advantage over the ordinary handloom in the production of 20x20 cloth. According to the Planning Commission study the cost of production by the improved and the ordinary handlooms both is about Rs.2.80 per metre. But the employment in the improved handloom is much more remunerative than in the handloom; the daily wage rate for the improved handloom is assumed to be Rs.7 as compared to Rs.3 for the handloom. On the other hand, the employment potential of the improved handloom is much smaller than that of the ordinary handloom. Employment/output ratio for the improved handloom is 90 person-days per 1,000 metres as compared to 230 person-days for the ordinary handloom. This illustrates the typical problem of the choice of technology in the interest of employment. In order to make the employment more remunerative, the technology has to be improved which in turn reduces the employment potential. Hence the choice must fall on that technique which, within certain production cost per unit, provides the largest possible employment at a certain minimum acceptable wage. A daily wage of Rs.7 which the improved handloom is able to pay appears to be acceptable; a wage of Rs.3 which the handloom can afford to pay probably is not acceptable. It is on these considerations that the choice of technology has to be made.

6.42 In fact, judged by the cost estimates given in the Planning Commission study, there is room for higher wages to be paid both in the improved handloom and the ordinary handloom and still remain competitive with the mill sector. The difference in the cost of production of 20x20 cloth between mill and improved handloom is Rs.440 per 1,000 metres. The employment in the improved handloom is 90 person-days per 1,000 metres. Hence, wage in the improved handloom can be raised by almost Rs.5 from Rs.7 to Rs.12 and still remain competitive with the mill sector. Similarly, the difference in the cost of production of 20x20 cloth between the mill and ordinary handloom is Rs.444 per 1,000 metres. Employment in the ordinary handloom is 230 person-days per 1,000 metres. Hence, wage in the handloom can be raised by almost Rs.2 from Rs.3 to Rs.5 and still remain cost-wise competitive with the mill sector, provided the handloom sector gets yarn at the same price and can sell its product at the same price as that of the mill sector.

6.43 Several questions arise: Should the ordinary handloom be protected from the competition from the improved handloom? It should be noted that the compe-

tion here is not cost-wise. The competition arises because of the more remunerative employment which the improved handloom provides. It is obvious that in the absence of such a protection the improved handloom will gradually displace the ordinary handloom provided, of course, the improved handloom is itself protected from the higher-wage employment in the powerloom and mill sectors. The handloom is already protected from the mill sector by freezing the weaving capacity in the mills; as already mentioned, expansion of powerlooms also will have to be contained if the handloom is to be protected. Supposing this is done, should we also protect the ordinary handloom from the improved handloom by the same method namely by preventing the expansion of the improved handloom which, in the present case, would mean banning it altogether? This would be administratively impossible. It would also not be desirable. Beginning with the First Plan, it has been emphasised that the traditional technology must be gradually but continuously improved so that employment in it becomes increasingly more remunerative. Hence, if handloom is protected from the mills and the powerlooms, it seems inevitable, and also desirable, that the improved handloom will gradually displace the ordinary handloom.

6.44 Another question which arises in this context is the following. Judging by the cost estimates given in the Planning Commission study, it is evident that, given the wage differentials between mills, improved handloom, and ordinary handloom, the latter two are cost-competitive with the mill. Moreover, they are already protected from the mill by freezing the weaving capacity in the mill sector. Under the circumstances, is it necessary to give them additional protection of a duty differential? More specifically, the mills pay an excise duty of Rs. 137 per 1,000 metres of 20x20 cloth whereas the handlooms, whether improved or ordinary, pay no duty. What is the function and justification of this duty differential between the mill sector and the handloom sector? It is said that, besides the low productivity of its technique, the handloom sector suffers from many disadvantages vis-a-vis the mill sector. The Planning Commission study does not take these into account. For instance, in the Planning Commission study, yarn for all the sectors is valued at the actual costs of production of yarn supplied by the NTC. But the NTC meets only a fraction of the yarn needs of the handloom sector and many handloom weavers have to buy their yarn in the market at prices considerably higher than its cost of production. Similarly, the Planning Commission study assumes that all sectors pay interest on their fixed and working capital at a uniform rate of 16% per annum. In fact, the handloom weavers have to borrow at much higher and often exorbitant rates. Further, the handloom weavers probably have to give a much larger commission on the sale of their product. In fact, the handloom weaver is mostly a wage earner and all the margins are usurped by the trader-money-lender who supplies them the yarn, the credit and who markets their product. There is little doubt that the handloom weaver, and in general the unorganised sector of production, suffers from these several handicaps. These are generally recognised and, beginning with the First Plan, it has been emphasised that the unorganized sector must be provided with the necessary infrastructure for the supply of raw materials, credit and for the marketing of its product. Even in the handloom sector which is relatively better attended to, the conditions in these respects are not entirely satisfactory. We wish to emphasise that in the absence of such infrastructure, the duty advantages would go to unintended quarters, namely the trader-money-lender and not the handloom weaver for whom they are intended.

6.45 If an adequate infrastructure is provided, the duty advantage should reach the weaver and it should be possible to pay him a higher wage. This would be the justification of the duty advantage. Consider the case of 40x40 count cloth. According to the Planning Commission study, the cost of production of this cloth is Rs.3,195 per 1,000 metres in the mill and Rs.3,178 per 1,000 metres on the handloom. This is on the basis of a wage rate of Rs.3 for the handloom weaver. It is obvious therefore that without a duty differential, it will not be possible to pay the weaver a wage higher than Rs.3 per day. In the present case, the mills pay a duty of Rs.1,150 per 1,000 metres of 40x40 cloth. The employment/output ratio in the handloom is 380 person-days per 1,000 metres of 40x40 cloth. Hence, if the entire duty differential goes to the weaver, it should be possible to increase the wage by about Rs.3; that is from Rs.3 to Rs.6. If this is not done and if the wage continues to be more or less Rs.3 per day as the Planning Commission study suggests, it is evident that the duty advantage goes to the unintended quarters.

6.46 We have already said that we do not regard the cost estimates given in the Planning Commission study as conclusive. In fact other evidence suggests that the wages assumed for the powerloom and handloom sectors namely Rs.7 and Rs.3 respectively are too low. For instance, in a recent Survey of Handloom Sector (1978), the South India Textile Research Association, Coimbatore, gives comparative cost data on two items: (a) bleached dhoties on handloom and powerloom, and (b) grey gada on handloom, powerloom and in mills. The cost of production of bleached dhoti is as under:—

Cost of Production of Bleached Dhoti

(Rs. per 100 metres)

	<u>Handloom</u>	<u>Powerloom</u>
Yarn	342.8	356.5
Bleaching, dyeing	20.0	20.0
Winding, warping, beaming, drawing-in/typing-in, and pirn-winding	25.8	14.7
Weaving	<u>100.0</u>	<u>30.0</u>
Total:	<u>488.6</u>	<u>421.2</u>

Thus, the cost of production of bleached dhoti on handloom is 67.4 paise per metre more than on powerloom. The difference is due to labour costs of preparatory work, mainly winding and pirn-winding and labour costs of weaving. The difference in labour costs of winding and pirn-winding is because, as against, a conventional rattai used by handlooms for preparing the warp, the powerlooms use power driven dabba winding machines, and circular pirn-winding machines. The difference in labour costs of weaving is because the production per powerloom is about three times that of a handloom and an operative looks after 2 to 4 powerlooms as against one loom by the handloom weaver. Consequently, the productivity of a weaver in powerloom is about 9 times that in handlooms, and though his wage rate per metre is less than one-third, his earnings would be about 3 times that of the handloom weaver, according to SITRA.

6.47 The cost of production of grey gada on handloom, powerloom, and in the mills is as under:

Cost of Production of Grey Gada in Different Sectors

	(Rs. per 100 metres)		
	<u>Handloom</u>	<u>Powerloom</u>	<u>Mills</u>
Yarn	280.4	291.6	255.2
Winding, warping, sizing, etc.	21.3	19.2	18.1
Weaving, etc.	81.2	36.6*	61.1**
Total	<u>382.9</u>	<u>347.4</u>	<u>334.4</u>

* Inclusive of powerloom owner's profits and excise duty on yarn.

**Inclusive of excise duty.

Thus, the cost of production inclusive of excise duty is the lowest in the mill sector; it is lower by 13.0 paise per metre than in the powerloom sector and by 48.5 paise per metre than in the handloom sector. The handloom and powerloom sectors suffer from higher price of yarn; the handloom sector, in particular also suffers from higher wage costs. The yarn cost for the composite mills is cheaper by about 15 per cent since they do not pay packing, forwarding charges and profits on yarn. On the other hand, yarn quality for mill cloth has to be superior and is assumed to cost about 6 per cent more. On balance, the cost of yarn in composite mills is about 9 per cent lower than in handlooms. In powerlooms also a better quality of yarn is required and is assumed to cost 4 per cent more than in handloom.

6.48 The cost of handloom cloth is thus higher than the mill cloth because the latter has the advantage of low yarn cost as well as low conversion costs because of high productivity. In comparison with the powerloom also its cost is higher because the productivity of a powerloom operator is at least 6 times as high as that of the handloom weaver. In consequence, not only the cost of weaving is higher in handlooms than in powerlooms, but also the earnings of the handloom weaver are considerably lower. For instance, the output of gada per 8 hours in powerloom is about 30 metres as compared to 9.5 metres in handlooms. At the rate of 33 paise per metre, a powerloom operator would earn Rs. 9.9 per loom shift of which he has to pay about Rs. 3.50 for yarn preparation, power, stores, and other overheads. Thus, a powerloom operator looking after two looms can earn about Rs. 12 per day of 8 hours. The handloom weaver though paid at a higher rate of Rs. 1.02 per metre would earn about Rs. 9.7 per shift of 8 hours of which he would spend about Rs. 2.0 on yarn preparatory expenses so that his net earnings would be about Rs. 7.7 per day of 8 hours.

6.49 Thus it will be seen that, in comparison with the Planning Commission study, the above study by SITRA implies both higher productivity and higher wages in the handloom sector. In the Planning Commission study, the employment/output ratio for the 20x20 cloth is taken as 230 person-days per 1,000 metres which includes labour engaged in preparatory operations. This gives an output of 4.45 metres per person-day of all labour. In contrast, the SITRA study indicates that the output of gada per handloom weaver is 9.5 metres per day. Judging by the wages paid for winding, warping, sizing, etc. it seems that, for every weaver-day, about one-fourth person-day is needed for the preparatory operations. Hence the output of all labour is

about 7.6 metres of gada per person-day. This is about 70 per cent higher than assumed in the Planning Commission study. On the other hand, the Planning Commission study assumes a daily wage of only Rs.3 while the SITRA study estimates the daily earning in the handloom at Rs.7.7. Fortunately the two differences partly compensate each other. As a result the difference between the two studies regarding wages paid per metre is small. It is Rs.1.137 per metre of 20x20 cloth in the Planning Commission study and Rs.1.025 per metre of gada in the SITRA study. As a via media we shall assume a wage of Rs.1.10 per metre of handloom cloth.

6.50 We have estimated earlier that the direct and indirect financial assistance given to the handloom sector in 1978-79 amounted to Rs58.94 crores exclusive of sales rebate given by the state governments. It will be relevant to relate this quantum of assistance to the wages paid in the handloom industry and to the employment protected thereby. As already noted the output of the handloom sector in 1978-79 is estimated at 2,045 million metres, a large part of which is of medium-A, Medium-B, and coarse varieties, that is of less than 35x35 count. At the rate of Rs1.10 per metre the total wages paid in the industry is estimated to be Rs.224.95 crores. Hence, the total financial assistance which does not include rebate on sales given by the State Governments works out to 26.2 per cent of the wage bill.

6.51 In order to relate the financial assistance to the employment protected thereby, we need estimates of employment in the handloom industry. Presently, this is estimated to be about 10 million most of whom are of course employed only part-time. To estimate an equivalent fulltime employment, we shall assume that an annual wage of Rs.1,800 which, at the rate of Rs.1.10 per metre, implies an annual production of 1,636 metres, constitutes fulltime employment. By that norm, the equivalent full-time employment in the industry is estimated to be about 1.25 million persons. Employment protected is the additional employment that handloom industry provides over what the same production in the mill sector would provide. To estimate the latter, we shall assume employment/output ratio of 60 workers per million metres as indicated by the aggregate output and employment data earlier presented. On that basis, if the entire output of the handloom industry amounting to 2,045 million metres was produced in the mill industry, it would employ only 1.227 lakh persons. This is only 9.8 per cent of the 1.25 million employed in the handloom industry. Incidentally, we may note that this tallies well with the assumed employment/output ratios in the Planning Commission study: they are 21 person-days per 1,000 metres of 20x20 cloth in the mill sector and 230 person-days in the handloom sector so that the per unit employment in the mill industry is 9.1 per cent of the same in the handloom industry. Hence, the additional employment in the handloom industry turns out to be 11.273 lakhs. This is the employment, in terms of equivalent full-time employment, protected by the financial assistance amounting to Rs.58.94 crores which works at Rs.523 per equivalent full-time worker.

6.52 Let us now turn to another sector of the textile industry namely the khadi industry. Its employment potential is even greater than that of the handloom industry. The production of cotton khadi in 1977-78 was 57.2 million metres valued at Rs.424 million. It is estimated that this provided full time employment to about 2 lakh persons and part-time employment to 5 lakh persons. Wages paid to them amounted to Rs.240 million. As in the case of handloom industry, we might estimate the financial assistance provided directly or indirectly to protect and support this employment.

loom industry, the khadi industry receives financial assistance in three exemption from excise duty; (ii) sales rebate, and (iii) interest subsidy. We have estimated the duty advantage given to the handloom industry over cotton in 1978-79 at Rs.47.44 crores. The value of output of the industry was estimated at Rs.537.5 crores. Hence, the duty advantage constitutes 8.8 per cent of the value of output. At the same rate ad valorem the duty advantage for the handloom industry in 1977-78 would amount to Rs.3.73 crores. The total financial assistance amounts to the following:

Financial Assistance to Khadi Industry in 1977-78

	(Rs.
Duty advantage	3.73
Sales rebate	
Interest subsidy	6.62
	<u>19.14</u>

Thus, in addition to the wage bill of Rs.24.0 crores, the financial assistance to the handloom industry amounts to 79.8 per cent of the wage bill.

Wages amounting to Rs.24.0 crores paid in khadi industry are not shown for spinning wages and weaving wages. It is possible that the element of subsidy is higher in spinning than in weaving. In that case, it may be that the wages for spinning are subsidised to an extent even more than 100 per cent. This would increase the direct and indirect financial assistance being given to hand-spinning by the spinner.

The extent of protection which hand-spinning would need may be judged only by comparing its cost of production with cost of production of mill-yarn. Unfortunately, the long history of this problem, comparative data on cost of production are not available. A hypothetical comparison was presented to us by the National Textiles Corporation which we shall briefly place on record.

The Khadi and Village Industries Commission has developed a series of improved charkhas, the most productive of which is the 12-spindle new model charkha. A comparison is made between 25,000-spindles spinning mill with a capacity of Rs.1.64 crores and an installation of 12-spindle charkhas of equal capacity. All processes upto drawing are done by common machines. The comparison is as follows:

COMPARISON BETWEEN SPINNING MILL AND 12 SPINDLE CHARKHA COMMON MACHINES UPTO DRAWING

Total Investment: Rs.1.64 crores

	<u>25000 Spl. Mill</u>		<u>12 Spl. Charkha</u>
	<u>Rs.</u>		<u>Rs.</u>
17 Nos. Complex	36,00,000	800 Nos. 8 spl. Fly Frame	26,40,000
62 Nos. Spinning Frame	110,00,000	5500 Nos. 12 Spindle Charkha	137,50,000
Building	8,00,000	(No separate building. No Electrical Equipments)	
Electrical er	8,00,000		
	1,00,00,000		163,90,000
Employment per shift	(40s Count)		
Direct Labour	48 persons	Direct Labour	6,300 persons
Investment per head	Rs.3,50,000/-	Investment per head	Rs.2,600
Total No. of Spinning Spindles	25,000 spls.	Total No. of Spinning Spindles	66,000 spls.
Production)(40s per 8 hr. shift)	1,800 kgs.	Production per shift	3,000 kgs.
<u>Operation by Electricity</u>		<u>Manual Operation</u>	
Total wages per day at Rs.25/- per worker	Rs. 1,200	Total wages per day at Rs.8/- per worker	Rs.50,400/-

6.56 Thus the labour cost of mill-yarn works out at Rs.666.67 per tonne. The labour cost of hand-spinning even at wages less than one-third in the mill comes to Rs.16,800 per tonne. The capital costs of the two installations are equal namely Rs.1.64 crores. But because the output of charkha installation is greater (3,000 kg.) than that of the comparable mill (1,800 kg.) the capital cost per unit of output will be greater in mill than in hand-spinning. To work out this cost, let us suppose that the annual output of the mill is 600 tonnes and that of the charkha installation is 1,000 tonnes. If the capital cost of Rs.1.64 crores is to be recovered over a period of 10 years at 10% rate of interest, the equated annual charge works out to be about Rs.26.04 lakhs. This will be the same for both the installations. Hence, the capital charge per tonne of yarn will be Rs.4,333.33 in mill and Rs.2,604 in hand-spinning. Thus the capital + labour cost per tonne of mill yarn will be Rs.5,000 while that of the hand-spun yarn will be Rs.19,404. To the capital and labour cost of mill-yarn will have to be added the cost of electricity on which we have no immediate information. If we take it to be Rs.1,000, the difference in the cost of production will be Rs.13,400 which is 80 per cent of the labour cost in hand-spinning. Thus even with the 12-spindle new model charkha, hand-spinning must receive support to the extent of 80 per cent of the wage, if wage is paid at Rs.8 per day as assumed in the above illustrative comparison.

6.57 It has been suggested that if the 12-spindle new model charkha is worked on a small electric motor, its productivity can be increased by 50 per cent. On that basis, the production per shift of the above installation will be 4,500 kgs. Keeping the wage rate the same namely Rs.8 per day, the labour cost will be reduced to Rs.11,200 per tonne. But of course the investment cost will increase. If we assume the price of a small electric motor to be Rs.500, the cost of 6,000 electric motors will be Rs.30 lakhs so that the investment in the 12-spindle charkha installation will increase from Rs.164 lakhs to Rs.194 lakhs. The equated annual charge will increase from Rs.26.04 lakhs to Rs.30.80 lakhs. But the annual output will now be 1,500 tonnes instead of 1,000 tonnes. Hence, the capital charge per tonne of yarn will be Rs.2,053. Thus, the capital + labour cost per tonne of yarn in the new installation will be $\text{Rs.11,200} + 2,053 = \text{Rs.13,253}$. The cost of the mill yarn is Rs.5,000 per tonne. Hence, the difference between the cost of production of mill and electrified 12-spindle charkha will be Rs.8,253 per tonne of yarn and will constitute 73.7 per cent of the labour cost. Thus even with electric motor, the 12-spindle charkha will require support to the extent of almost 75 per cent of the wage bill if wage is paid at the rate of Rs.8 per day as mentioned in the above illustrative comparison.

6.58 It should be noted that such support is being given not only for the traditional labour-intensive technologies as in khadi and handloom industries but also to a number of textile mills which for various reasons began to run into losses. The National Textile Corporation was set up in 1968 with the main objective of taking over and managing such chronically sick textile mills. In 1976-77, the NTC with its 9 subsidiaries managed 103 sick mills. Their combined production in 1976-77 amounted to 816 million metres of cloth and 57 million kgs. of market yarn. The gross value of output was Rs.347 crores. Number of workers employed was about 160,000. Most of the mills taken over are not yet viable and, though the losses are declining, they are still substantial. The combined losses amounted to Rs.57.51 crores in 1975-76, Rs.35.83 crores in 1976-77 and Rs.28.28 crores in 1977-78. These are exclusive of the bonus payments which were Rs.6.81 crores in 1976-77 and Rs.7.19 crores in 1977-78. If we add the bonus to the losses, the losses per worker employed amount to over Rs.2,600 in 1976-77 and over Rs.2,200 in 1977-78. The wages paid to workers are not readily available. But, supposing that the bonus was paid at 8.33 per cent, the wages together with the bonus would be about Rs.88.56 crores in 1976-77 and Rs.93.43 crores in 1977-78. On that assumption, the losses would constitute 48.1 per cent of the wages in 1976-77 and 38.0 per cent in 1977-78. The NTC has an investment plan amounting to Rs.203 crores for modernisation. It may be noted that this amounts to over Rs.12,500 per worker.

6.59 Thus employment in several sectors of the textile industry is being supported in one form or another. But there appears to be no coherent policy to decide as to whom to give and how much to give. In the absence of such a policy, there is always the danger of creating new vested interests who will have to be continually supported.

APPENDIX I

IMPACT OF IMPROVED MACHINERY ON EMPLOYMENT IN COTTON SPINNING MILLS

A.6.1.1 All mills submit to the Textile Commissioner a number of statistical returns. The Textile Commissioner was kind enough to make available for our study the punched cards of the following returns for the year 1978:

- | | | |
|----|---------|--|
| A. | Annual | Statistical Return - Form CST-A Installed capacity in Mill |
| B. | Monthly | Statistical Return - Form CST-B Labour and Machinery Engaged |
| C. | Monthly | Statistical Return - Form CST-C Yarn Production, Packing, Consumption and Deliveries |
| D. | Monthly | Statistical Return - Form CST-D Cloth Production, Packing and Deliveries |

A.6.1.2 Form CST-A gives information regarding machinery in terms of numbers installed and numbers idle and proposed to be installed. The machinery is classified by processes. The form CST-A has 25 parts. For a number of items we get the classification of machinery into manual/auto, conventional/high speed, ordinary/high speed and so on.

A.6.1.3 Form CST-B gives monthly statement in labour and machinery engaged. This form has four parts. Part (1) gives the number of employees on roll, number of spindles, looms and knitting and netting machinery installed. Part (2) gives shift-wise average daily employment in four departments namely (i) spinning and spinning preparatory, (ii) weaving and weaving preparatory, (iii) processing and (iv) miscellaneous. It also gives the number of days the mill worked during the month for each of three shifts. Part (3) gives shiftwise average daily machine capacity worked for. This is given for (i) spindles, (ii) looms and (iii) knitting and netting machinery. The machine capacity worked for is given for (i) cotton, (ii) non-cotton and (iii) blended and mixed textiles separately. Part (4) gives reason-wise number of machine shifts of spindles and looms lost.

A.6.1.4 Form CST-C gives information regarding yarn and has five parts giving (i) countwise production, consumption and packing of cotton yarn, (ii) countwise deliveries and stock of cotton yarn, (iii) count-groupwise production, consumption and deliveries of 100 per cent non-cotton yarn, (iv) count-groupwise production, consumption and deliveries of blended yarn and (v) output, consumption, deliveries and stock of waste cotton and other fibres.

A.6.1.5 Form CST-D gives the information on cloth production, packing and deliveries in 11 parts. Most of the data are sort-wise and with categories like

cotton/non-cotton, coarse/medium/fine, bleached/mercerised, etc. The data on loom state cloth production given in the first three parts, namely (i) cotton, (ii) non-cotton, and (iii) blended and mixed was collected. The data on cotton cloth production is given for coarse, medium-B and medium-A, fine and super-fine categories; that on non-cotton is given for viscose, acetate, polyester and other synthetic types. The data on blended and mixed cloth is given for 7 different types of mixings.

A.6.1.6 There were in all 631 mills of which 348 were spinning only and 283 were composite (spinning and weaving). The analysis was confined to spinning mills only.

A.6.1.7 Output of yarn per worker, output of yarn per spindle and labour employed per spindle were the three indicators to be considered. As stated earlier, the data of output etc. was at monthly level. Hence it was necessary to aggregate these data for 12 months and to obtain the monthly averages. All the mills did not have all the 12 months' data. In the cases where the data was not available for all the 12 months, only the real¹ data was used for computing monthly averages.

A.6.1.8 Monthly averages were computed for each item of the data collected. The next step was to take into account the shifts while handling the data from form B. All the data on labour and machinery engaged was available for the three shifts separately. Shiftwise average daily employment of labour in four departments namely, (i) spinning and spinning preparatory, (ii) weaving and weaving preparatory, (iii) processing and (iv) miscellaneous; and average daily machine capacity worked for, shift-wise for (i) spindles, (ii) looms and (iii) knitting and netting machinery was available separately for cotton, non-cotton and mixed textiles in this form B. Along with this data, the number of days the mill worked in each of the shift was also available.

A.6.1.9 Having chosen to analyse the spinning mills only, the labour employed only in spinning and spinning preparatory department was considered. Similarly, only the spindles engaged were considered. The three types of textiles, namely, cotton, non-cotton and mixed were taken together. The following four measures were computed for each mill: (i) Average number of days the mill worked per month in each shift, (ii) average daily employment in spinning and preparatory operations in each shift, (iii) average number of spindles engaged daily (cotton + non-cotton + mixed yarn) in each shift; and (iv) average monthly production of yarn (cotton + non-cotton + mixed) in kgs. Making use of these measures, the following three ratios were worked out R_1 = production of yarn per worker, per day, per shift; R_2 = production of yarn per 1000 spindles, per day, per shift; R_3 = number of workers employed per 1000 spindles, per day, per shift.

A.6.1.10 Before computing these ratios, the data was screened for incomplete reporting of the items to be used. After removing the cases of incomplete data, only 204 mills remained for analysis. These mills have been classified into management

1. In some cases the mill might not have worked for some months. In some cases the mill might have worked but not furnished the data. The Textile Commissioner's office usually prepares the 'estimate' cards if there is enough evidence that the mill has worked. These estimates are based on previous data. While computing the monthly average we did not use those estimates; only the real data was utilized.

types, namely, (i) Government, (ii) Co-operative and (iii) Others. The Management type and statewide distribution of these 204 mills is given in Table 6.2. For each of these mills the ratios R_1 , R_2 and R_3 were computed. The frequency distribution of these mills on the basis of R_1 , R_2 and R_3 has been presented in Table 6.3. The mills show large variations in each of these ratios. Therefore, for an explanation the data on the machinery was analysed.

A.6.1.11 As stated earlier, form CST-A gives installed capacity, idle capacity and capacity proposed to be installed. For the purpose of the present study, the last category is not relevant. Also, for the appropriate analysis in relation to output and employment, the idle capacity should be subtracted from the installed capacity. This was done for all the items of machinery reported in this form.

A.6.1.12 Having delimited the analysis to only spinning mills, of the 25 parts in Form A only 6 were relevant. As stated earlier, many of the items of machinery are classified into manual/auto, conventional/high speed, ordinary/high speed, etc. For the items for which such classification was available, the ratios of auto to manual, high speed to conventional, etc. were computed. R_1 , being the index of output per worker, higher R_1 would mean more capital intensive (or less labour intensive). Therefore, the mills having higher values of R_1 , are expected to have more modern machinery. R_2 being the index of output per spindle, higher value of R_2 will indicate less labour intensive technology. Thus higher ratios of modern to conventional machinery should be associated with higher value of R_2 . R_3 gives labour engaged per spindle. Higher values of R_3 indicate higher labour intensity. Hence the ratios of modern to conventional machinery should be smaller for the mills with larger R_3 .

A.6.1.13 Table 6.3 gives the group frequencies for each of the ratios R_1 , R_2 and R_3 . The computations of ratios of modern to conventional machinery were carried out for each of these groups separately. It will be seen that the ratios do not show the expected relation with the ratios R_1 , R_2 and R_3 .

A.6.1.14 The items for which these ratios are calculated are given below.

Part (2): Spinning preparatory machinery.

- (1) Blow room lines, single process, auto doffing/manual doffing.
- (2) Blow room lines, single process/conventional
- (3) Cards highspeed/conventional
- (4) Cards semi highspeed/conventional
- (5) Cards highspeed + semi high speed/conventional
- (6) Combers high speed/conventional

Part (3): Draw frames and speed frames (top arm drafting)

Part (4): Speed frames (conventional drafting) and mules

- (7) Draw frames, high speed frames/conventional frames
- (8) Draw frames, high speed delivery/conventional delivery
- (9) Top arm canfed inter frames/conventional inter frames

- (10) Top arm canfed inter spindles/conventional inter spindles
- (11) Top arm canfed roving frames/conventional roving frames
- (12) Top arm canfed roving spindles/conventional roving spindles
- (13) Top arm simplex frames/conventional simplex frames
- (14) Top arm simplex spindles/conventional simplex spindles

Part (5) and Part (6): Ring Spindles

Part (7): Classification of ring frame spindles as per drafting and as per rings

- (15) High speed ring frames/Ordinary ring frames
- (16) High speed ring spindles/ Ordinary ring spindles

Part (8): Classification of ring frame spindles as per inserts and drive

- (17) Plug type spindle frames/Ordinary spindle frames
- (18) Plug type spindles/Ordinary spindles
- (19) Ordinary spindle with high speed inserts: frames/Ordinary spindles with ordinary inserts; frames
- (20) Ordinary spindles with high speed inserts/Ordinary spindles with ordinary inserts

A.6.1.15 The ratios of modern to conventional machinery do not show the expected relation with the ratios R_1 , R_2 and R_3 . Even keeping out the extreme values for none of the items of machinery the ratios show any relation. However, one may point out a few exceptions like ratios No. 11 and 12 namely (Top-arm canfed roving frames)/(conventional roving frames), and (Top arm canfed roving spindles)/(conventional roving spindles). These two ratios have rising values for the groups of mills with higher R_1 (output per worker per day per shift). Another exception is ratios 1 and 3, namely, Blow room lines, single process auto doffing/manual doffing and high speed cards/conventional cards. With the rising value of R_3 (workers per 1000 spindles per shift), the values of these ratios fall as expected. But these few exceptions are not enough to establish any impact of improved machinery on employment.

Table A. 6. 1. 1:

Values of the ratios of improved machinery to conventional machinery in groups of mills according to production of yarn per worker, per day, per shift

Production of yarn (Kg.) per worker, per day, per shift	Blowroom Lines		Cards		Speedy	Combers High Speed	Frames High Speed	Delivery High speed	Canfed Inter frames	Canfed Inter spindles	
	Single Process Auto	Single Process	High Speed	Semi High Speed							
	1	2	3	4	5	6	7	8	9	10	
- 5.0	4.0000	5.0000	0.1176	2.9510	3.0686	1.3333	1.6364	0.5185	3.2222	3.4146	
- 7.5	3.0000	5.7143	0.1480	2.7138	2.8618	0.8704	0.6205	0.2074	2.2941	2.1464	
- 10.0	3.4444	5.3333	0.3601	3.0215	3.3816	2.3256	2.1226	0.8382	2.0000	1.9297	
- 12.5	1.9048	6.7778	1.1538	4.7356	5.8894	3.0417	1.2469	0.4392	1.6956	1.4962	
- 15.0	4.0000	9.0000	0.3242	2.3269	2.6511	0.9000	4.4146	1.6786	3.5000	3.0613	
- 17.5	6.5000	18.7500	3.2549	14.6471	17.9020	0.4146	1.6538	0.6301	81.0000	82.7213	
- 20.0	0.9091	21.0000	1.6666	4.4242	6.0909	-	1.9394	0.5776	0.7143	0.6818	
- 22.5	2.3333	-	-	-	-	-	3.2000	1.0962	1.6667	1.3088	
- 25.0	16.0000	4.0000	0.6053	0.9375	1.1989	7.3333	2.2272	0.9677	1.0000	1.0543	
Above 25	12.5000	13.5000	2.9804	6.9216	9.9020	4.7500	3.9231	1.6687	4.6000	4.4320	
Production of yarn (Kg) per worker, per day, per shift	Canfed Roving frames	Canfed Roving spindles	Simplex frames	Simplex spindles	High Speed ring frames	High speed ring spindles	Plug type spindle frames	Plug type spindles	Ordinary spin- dles with high speed inserts; frames	Ordinary spin- dles with high speed inserts; frames	Ordinary spindles with ordi- nary inserts
- 5.0	0.6667	0.6201	6.2000	5.9532	6.3667	5.3886	1.44	1.3905	1.0416	0.9204	
- 7.5	1.3333	1.3285	13.7500	12.0342	1.6902	1.7438	1.19	1.2268	0.4597	0.4298	
- 10.0	1.4138	1.2745	6.7000	5.8258	1.9470	1.8435	3.14	3.2442	0.7359	0.7128	
- 12.5	3.3571	2.9604	7.3478	6.1263	3.3643	3.4307	3.12	2.9955	0.2763	0.2417	
- 15.0	4.6667	3.3880	31.0000	24.7617	3.2762	3.3734	1.90	1.9535	0.7148	0.7655	
- 17.5	11.0000	8.8055	10.6667	9.5507	2.0534	2.1433	5.53	5.6281	11.1875	10.5944	
- 20.0	0.0000*	0.0000*	7.7000	6.3006	5.5161	5.8834	7.18	7.4867	-	-	
- 22.5	0.0000*	0.0000*	4.0000	3.8759	13.8571	13.3151	1.50	1.6099	0.5244	0.5913	
- 25.0	0.0000*	0.0000*	7.1111	6.1265	4.5205	4.6018	99.75	105.4350	0.0000	0.0000	
above 25	0.0000*	0.0000*	5.3333	4.4559	4.1111	4.0283	7.75	7.3579	4.0000	42.0792	

* For Mills in these groups both Numerator and Denominator were zero.

Production of yarn (kg) per 1000 spindles, per day, per shift	Blowroom Lines		Cards		Speedy	Combers		Frames		Delivery	Canfed		Canfed
	Single Process Auto	Single Process Manual	High Speed	Semi High Speed		High speed	High Speed	High Speed	High Speed	High Speed	Inter frames	Inter spindles	
	1	2	3	4	5	6	7	8	9	10			
- 30	2.4000	8.5000	0.9231	7.8654	9.7885	1.0968	2.0238	0.7463	2.5000	2.6146			
- 40	17.0000	6.0000	0.4706	3.5647	4.0353	1.2187	1.3864	0.5130	6.2500	5.6217			
- 50	3.2000	10.5000	0.9927	5.9493	6.9420	2.7333	1.3805	0.4921	4.7500	4.2745			
- 60	0.9000	4.2222	0.2962	1.3924	1.6886	1.3333	1.3786	0.4763	1.6207	1.6128			
- 70	7.7500	5.0000	0.8128	2.3014	3.1142	1.3947	2.3492	0.7884	4.0000	3.8567			
- 80	5.5000	13.0000	0.4144	1.5991	2.0135	1.5000	2.0385	0.7439	3.4615	3.4172			
- 90	2.4286	4.8000	0.3418	6.0886	6.4304	1.2692	1.7872	0.5350	0.1875	0.1757			
- 100	5.2500	5.0000	0.0714	1.4893	1.5607	0.4182	0.6387	0.2337	23.0000	22.7487			
- 150	4.6316	26.7500	1.3497	7.0000	8.3497	8.6667	4.0308	1.5388	2.2500	1.9801			
Above 150	2.3333	6.6667	1.8421	7.9158	9.7579		1.8923	0.7546	2.0000	1.7452			

Production of yarn (kg) per 1000 spindles, per day, per shift	Canfed Roving frames	Canfed Roving spindles	Simplex frames	Simplex spindles	High speed ring frames	High speed ring spindles	Plug type spindle frames	Plug type spindles	Ordinary Spindles with high speed inserts: frames	Ordinary spindles with ordinary inserts
	Conven-tional frames	Conven-tional spindles	Conven-tional	Conven-tional spindles	Ordinary frames	Ordinary ring spindles	Ordinary spindle frames	Ordinary spindles	Ordinary with ordi-nary inserts: frames	Ordinary spindles
	11	12	13	14	15	16	17	18	19	20
- 30	16.0000	18.5909	43.0000	38.4722	6.6078	6.1499	5.1092	3.5931	1.0517	0.5039
- 40	-	-	20.6667	15.1305	4.6518	4.6665	2.3404	2.3733	0.5221	0.5112
- 50	0.7333	0.7488	14.7143	13.4009	2.9415	2.8998	3.7348	3.6664	0.1219	0.1239
- 60	0.8500	0.8147	6.0500	5.2080	1.6356	1.6082	2.2841	2.3743	1.1759	1.1522
- 70	0.5714	0.3356	32.0000	28.9750	2.1634	2.2807	2.3543	2.4436	0.9135	0.8944
- 80	-	-	6.6667	4.6651	2.4484	2.537	2.1321	2.2417	0.2927	0.2918
- 90	2.0000	1.7778	3.8947	3.5623	9.4823	9.4157	2.1792	2.2303	0.7097	0.7068
- 100	5.0000	3.1481	3.6154	2.9430	1.4187	1.5118	5.0866	5.1526	1.2679	1.2944
- 150	3.0000	2.3333	7.4286	6.6657	2.7729	2.8702	3.6627	3.7357	1.3681	1.3470
Above 150	1.5000	1.1548	7.3000	6.2357	1.9231	1.9602	3.6025	3.8061	0.9876	1.0536

APPENDIX II
RATES OF EXCISE DUTY ON COTTON FABRICS
SECTORWISE (1979-80)
(Tariff Item No. 19 I)

Sl. No.	Description	Mill made	Handloom fabrics processed by independent processors approved by Government	Handloom fabrics processed by Registered Handloom Co-operative Society	Handloom fabrics processed by independent processors not approved by Government	Powerloom fabrics processed by independent processors	Hand processors not using power or steam
1	2	3	4	5	6	7	8
1.	Cotton fabrics in which the average count of yarn is 41s or more	15%	5% - without printing or dyeing or both 9% - with printing or dyeing or both	No duty	*11% 12%	11% 12%	No duty
2.	Cotton fabrics (other than those in which the average count of yarn is 41s or more)						
	Whose Value per Sq. Metre:						
i)	Does not exceed Rs.4:	2%	0.80%	No duty	1.40%	1.40%	No duty
ii)	Exceeds Rs.4 but not Rs.6:	3%	1.20%	No duty	2.10%	2.10%	No duty
iii)	Exceeds Rs.6 but not Rs.7:	4%	1.60%	No duty	2.80%	2.80%	No duty
iv)	Exceeds Rs.7 but not Rs.8:	6%	2.40%	No duty	4.20%	4.20%	No duty
v)	Exceeds Rs.8 but not Rs.9:	8%	3.20%	No duty	5.60%	5.60%	No duty
vi)	Exceeds Rs.9 but not Rs.10:	10%	4.00%	No duty	7.00%	7.00%	No duty
vii)	Exceeds Rs.10 but not Rs.11:	12%	6.00%	No duty	9.00%	9.00%	No duty
viii)	Exceeds Rs.11 but not Rs.12:	14%	8.00%	No duty	11.00%	11.00%	No duty
ix)	Exceeds Rs.12:	15%	9.00%	No duty	12.00%	12.00%	No duty

* In the Budget proposals effective from 1.3.1979 the duty was increased from 8% to 12% which has been reduced to 11% with effect from 24.4.1979.

Note: 1. The above effective rates of duty on cotton fabrics are composite ones representing basic and additional excise duty in lieu of sales tax. The allocation between basic and additional duty is 75% and 25% respectively.
2. In addition to above, there is a special excise duty of 5% on basic duty effective from 1.3.1978 and additional excise duty @ 10% of basic duty effective from 4.10.1978.
3. In respect of handloom fabrics processed by independent power processors not approved by Government (col.6 of the above table) and powerloom fabrics processed by independent power processors (col.7 of the table) there was a concessional rate of duty on processing (i.e. bleaching), without printing or dyeing or both, of 8% ad valorem vide Notification No.226/77 dated 15.7.1977. This concession has been withdrawn through the 1979-80 Budget vide Notification No. 60/79 dated 1.3.1979.

APPENDIX III

ESTIMATE OF REVENUE COST OF EXEMPTION/CONCESSION IN EXCISE DUTIES TO HANDLOOMS AND POWERLOOMS

A.6.3.1 The incidence of excise duties on cotton fabrics produced by different sectors of the textile industry based on certain assumptions is indicated in para 6.25. The assumptions are explained in para 6.26. The incidence of duty which would be payable on cotton textiles made in handlooms had they been subjected to duty at the mill rate is given below:

Incidence of duty on handloom fabrics at rates of duty applicable to mill fabrics

		(Paise per sq. metre)
		At Mill Rate
<u>Unprocessed</u>		
Superfine	Yarn + Fabric + Cess =	23.8 + 68.9 + 1.0 = 94.6
Fine		30.7 + 48.9 + 1.9 = 81.5
Med. A		12.0 + 5.4 + 1.9 = 19.3
Med. B		5.6 + 3.1 + 1.9 = 10.6
Coarse		4.5 + 7.6 + 1.9 = 14.0
<u>Processed</u>		
Superfine:		
White {		
Others {	23.8 + 86.0 + 1.9 =	111.7
Fine:		
White {		
Others {	30.7 + 61.1 + 1.9 =	93.7
Medium A	12.0 + 6.7 + 1.9 =	20.6
Medium B	5.6 + 3.9 + 1.9 =	11.4
Coarse	4.5 + 14.3 + 1.9 =	20.7

A.6.3.2 Since the incidence of duty varies with the category (i.e. superfine, fine, etc.) and value of fabrics, in estimating the revenue which would have accrued to the exchequer had the fabrics produced in handlooms been taxed at the same rate as applicable to mill made cotton fabrics, it is necessary to have an idea of the quantity of fabrics produced in handlooms for each major category of fabrics (i.e. superfine, fine and so on) and their value. Estimates of total quantity of cotton textiles produced in the different sectors in 1978-79 are given in para 6.27. Category-wise break-up of the production of handlooms is not available. A rough estimate of the quantity produced in handlooms for different categories was made for this study on the basis of the following assumptions:

- (i) About 70% of the total production of handloom fabrics is cleared in grey form. About 30% of the fine and superfine processed handloom fabrics are cleared in white form.

- (ii) In the case of fine and superfine powerloom fabrics, about 30% are cleared grey. Further, about 70% of the processed fabrics of fine and superfine categories are cleared in white form. As regards powerloom fabrics of other categories about 70% are cleared in grey form.
- (iii) Only cotton fabrics falling in the category of Coarse, Medium A, Medium B, Fine and Superfine are taken into account; blended and industrial fabrics are not included.

A.6.3.3 On the basis of the above assumptions and applying the rates of duty on different categories of fabrics as shown in the table in para A.6.3.1 above, the total amount of duty which would be payable on handloom fabrics had they been taxed at the rates applicable to mill fabrics as also the duty now realised from them (in the form of processing duty) is indicated in the following table.

Revenue from Excise Duty on Handloom Fabrics

	Quantity (mn. metres)	Revenue at rates applicable to handloom fabrics (Rs. lakhs)	Aat rates applicable to mill fabrics (Rs. lakhs)
A. Grey Fabrics			
Superfine	72.1	-	681.3
Fine	133.7	-	1089.7
Medium A.	311.5	-	601.2
Medium B.	527.1	-	558.7
Coarse	387.1	-	541.9
B. Processed Fabrics			
Superfine:			
White	9.3	26.6 }	345.2
Others	21.6	111.5 }	
Fine:			
White	17.2	34.9 }	536.9
Others	40.1	146.8 }	
Medium A. .	133.5	36.0	275.0
Medium B.	225.9	36.1	257.5
Coarse	165.9	94.6	343.4
Total	2045.0	486.5	5230.8

From the above table it will be seen that as of 1978-79 the total amount of excise duty which would be payable on handloom fabrics at mill rate comes to Rs.52.31 crores while the duty actually payable is only about Rs.4.87 crores. Hence the revenue forgone in giving excise concession to the handloom sector in 1978-79 was about Rs.47.44 crores (Rs. 52.31 crores minus Rs.4.87 crores).

A.6.3.4 The incidence of excise duty which would be payable on powerloom fabrics had they been taxed at the rate of duty applicable to mill fabrics worked out on the assumptions specified earlier is indicated below.

Incidence of duty on powerloom fabrics at rates of duty applicable to mill fabrics

Category	(Paise per Sq. metre)	
	Unprocessed	Processed
Superfine	$23.8 + 49.4 + 1.9 = 75.1$	$23.8 + 61.8 + 1.9 = 87.5$
Fine	$30.7 + 74.1 + 1.9 = 106.7$	$30.7 + 92.6 + 1.9 = 125.2$
Medium A.	$12.0 + 7.2 + 1.9 = 21.1$	$12.0 + 13.5 + 1.9 = 27.4$
Medium B.	$5.6 + 5.6 + 1.9 = 13.1$	$5.6 + 7.0 + 1.9 = 14.5$
Coarse	$4.5 + 7.6 + 1.9 = 14.0$	$4.5 + 14.3 + 1.9 = 20.7$

A.6.3.5 Applying the rates indicated above the total revenue from powerloom fabrics works out to Rs.76.71 crores as against Rs.49.44 crores actually payable as may be seen from the following table.

Revenue from Excise Duty on powerloom fabrics

	Quantity (mn.metres)	Revenue at rates applicable to power loom fabrics (Rs.lakhs)	Revenue at rates applicable to power (Rs.lakhs)
<u>Grey fabrics</u>			
(Mn metres)			
Superfine	58.5	139.2	439.3
Fine	90.3	277.2	963.5
Medium A.	487.2	584.6	1028.0
Medium B.	242.9	136.0	318.2
Coarse	160.3	72.1	224.4
<u>Processed fabrics</u>			
Superfine:			
White	95.6	660.6	1194.4
Others	40.9	299.4	
Fine:			
White	147.5	1454.4	2638.0
Others	63.2	662.3	
Medium A.	208.8	448.9	572.1
Medium B.	104.1	109.3	150.9
Coarse	68.7	99.6	142.2
Total		4943.6	7671.0

The revenue cost of excise concession given to powerlooms in cotton textiles thus comes to Rs.27.27 crores (Rs. 76.71 crores minus Rs.49.44 crores).

A.6.3.6 It may be noted that although the rates of central excise duty are related to the area of the fabric i.e. per square metre, for purposes of calculation of revenue, these have been applied to linear metres as production figures are not readily available on area basis.

CHAPTER VII

OTHER INDUSTRY STUDIES

7.1 In this chapter we shall present brief studies of a few more industries on which we could obtain some relevant data. We should emphasise that we have not been able to verify the accuracy of the data presented to us and that we are using these data to illustrate the several considerations which should govern the level of protection to be given to labour-intensive technologies in various industries. The studies cover the following industries: (i) sugar, (ii) match, (iii) soap, (iv) leather, and (v) agricultural mechanisation.

SUGAR

7.2 Sugar is one of the eight industries identified by the Planning Commission as having large employment potential. In terms of employment sugar ranks next to textiles. Sugar industry comprises three sectors, namely (i) mills producing white sugar (hereafter sugar), (ii) khandsari units, and (iii) gur manufacturers. The technology for manufacturing sugar is called 'Vacuum Pan Sulphitation' (VPS) process while khandsari is made in Open Pans (OP). Out of the total production of sugarcane in the country, about 46 per cent goes into the production of gur, 13 per cent is used for making khandsari, 29 per cent for sugar and 12 per cent is used for seed, chewing etc.

7.3 At present there are a little over 300 sugar mills with installed capacity of 62.6 lakh tonnes, providing employment to about 3 lakh workers during crushing season and 1.4 lakh workers during off season. Estimates of employment in sugar factories are given in Table 7.1. As for khandsari and gur manufacturing units, no reliable estimates are available in respect of either production or employment. According to an estimate put forward by All India Improved Khandsari Manufacturers' Association, Moradabad (U.P.), khandsari industry employs about 20 lakh workers. Most of the employment appears to be in the non-factory sector. According to estimates made by the Planning Commission,¹ using employment norm of 43 mandays per tonne of khandsari, as of 1976-77, employment in the khandsari sector was 514 lakh mandays. Employment in the VPS sector was estimated at 397 lakh mandays.

Table 7.1
Number of workers employed in sugar factories

Year	No. of workers during crushing seasons	No. of workers during off season
1971-72	226,899	98,239
1972-73	233,153	102,914
1973-74	236,619	106,029
1974-75	251,007	116,236
1975-76	263,501	123,328
1976-77	282,519	131,418
1977-78	297,075	138,313

1. Planning Commission Project Appraisal Division, "Choice of Technology in the Sugar Industry" (1978), mimeo.

7.4 Although there seems to be a marked consumer preference in favour of white crystal sugar as compared to khandsari, puritywise, that is, in terms of grain size, khandsari is comparable with sugar. Khandsari however requires less capital per unit of output although it uses more sugarcane per unit of output. The relevant characteristics of production in the two techniques as worked out by the Planning Commission are given in Table 7.2.

Table 7.2
Economic Characteristics of Different Techniques

Ratio	Unit	OP Technology (Khandsari)		VPS Technology (Sugar)
		(6.8% Re- covery)	(7.5% Re- covery)	(9.4% Re- covery)
1. Fixed Capital/Output	Rupees/Tonne	2,246	2,037	4,349
2. Fixed Capital/ Employment	Rupees/Manday	62	52	435
3. Employment/Output	Mandays/Tonne	43	39	10
4. Material Cost/Output	Rupees/Tonne	2,484	2,255	1,832
5. Value Added/Output	Rupees/Tonne	616	845	1,268
6. Wages and Salaries/ Output	Rupees/Tonne	271	246	154
7. Wages/Value Added	Per cent	44	29	12

(Recovery rate relates to sugar/khandsari recovered from cane).

It will be seen that employment per unit of output is nearly four times in khandsari as compared to that in sugar. Also the capital per unit of output is only half in khandsari as compared to sugar. But material cost per unit of output is more in khandsari than for sugar. As regards cost of production, the comparative figures for the two technologies at identical input prices and for different input prices are given in Table 7.3.

Table 7.3.
Cost of sugar production by different techniques at 1976-77
prices for New Units

	OP Technology (Khandsari)		VPS Technology (Sugar)
	6.8% recovery (Rupees/Tonne)	7.5% recovery	9.4% Recovery (Rupees/Tonne)
1. At Identical Input Prices	3398	3080	3097
2. At Different Input Prices	3398	3080	3254

With identical input prices, and 7.5 per cent recovery, cost of production of khandsari is less than that of sugar; with 6.8 per cent recovery, cost of production of khandsari is higher. With different input prices, production cost of sugar is higher than that of khandsari if recovery in khandsari is 7.5 per cent, but lower, if the recovery rate for khandsari is taken at 6.8 per cent. However there is a marked consumer preference in favour of sugar as reflected in their higher wholesale prices. This difference, it may be argued, should be taken into account while comparing the relative costs of producing sugar and khandsari.

7.5 The Planning Commission study, which is concerned mainly with the question of allocation of capacity for additional production for the coming years between the two technologies, shows what would be the optimal share of khandsari in additional output if cost is to be minimised subject to constraints regarding employment and requirement of capital. The exercises done in the Planning Commission's study show that the priority to be accorded to the two technologies depends on the assumptions regarding the capital requirements and the employment constraints. The relative superiority of one sector over the other also depends on the assumptions one makes about the input prices as has been demonstrated in another study on sugar processing techniques in India¹. The problems of comparison of technologies and scale in sugar industry are brought out sharply in the concluding observations of this study which are reproduced below:

"Setting aside for the moment the slight difference in quality involved, the conclusions that we can draw about the choice of technology in sugar production are as follows. It was established that neither technology minimises costs over the entire range of costs of labour and capital. Then a form of social cost-benefit analysis was applied so as to indicate the parameters which determine the optimal choice between the technologies, i.e. that choice which minimises real social costs, given the objective of maximising aggregate consumption discounted over time. In fact this discount rate emerged as a key parameter, on which depends the social value attached to a unit of investment. Other major parameters of crucial importance in the comparison between largescale and small-scale production are the recovery rate of sugar from cane and the average length of the crushing season."

Conclusions about the relative merits of the two technologies thus depend on the assumptions about the prices of inputs and the discount rate.

7.6 It is also important to note that khandsari is more 'material intensive' and less efficient in that losses in milling and crushing are higher. Milling efficiency - measured as the proportion of juice actually extracted to the available juice in sugarcane - is 80 per cent in khandsari as compared to 90 per cent in sugar. The difference of 10 per cent decreases the recovery rate by 1 per cent. Even the 80 per cent level of efficiency, it appears, is not usually achieved by khandsari units because of the attempt on the part of managers to crush a larger quantity of cane at the expense of higher extraction rate. Some amount of sugar is also lost in boiling in the manufacture of khandsari. Thus, although it offers larger employment and uses less capital, khandsari involves certain costs to the community in terms of

1. C.G. Baron, "Sugar Processing Techniques in India" in *Technology and Employment in Industry: A Case Study Approach* edited by A.S. Bhalla (ILO, 1975).

wastage of material. The weights to be attached to consideration of employment, capital requirement and efficiency in production involve a value judgement. If employment is to be accorded high priority, khandsari merits support, but the cost of such support should be assessed and kept clearly in view so that the costs do not go beyond tolerable limits.

7.7 The structure of excise duties on sugar which forms Item No.1 of Central Excise Tariff is designed to favour the kahandsari manufacturers. Upto 1969 sugar was subjected to specific rates of duty at the rate of Rs.22.15 per quintal by way of basic excise duty and Rs.6.50 per quintal as additional excise. In 1969 these rates were converted into ad valorem rates of 19 per cent and 4 per cent respectively. The rates of duty on sugar since 1975 are set out in Table 7.4.

Table 7.4
Rates of Excise Duty on Sugar

With effect from	Effective Rate		Total %	Remarks
	Basic %	Additional %		
1.3.75	37.5	7.5	45	On free sale sugar
	15	5	20	On levy sugar
3.8.76	37.5	7.5	45	On free sale sugar
	10	5	15	On levy sugar
21.9.76	37.5	7.5	45	On free sale sugar
	15	5	20	On levy sugar.
1.11.76	34	7.5	41.5	On free sale sugar
	15	5	20	On levy sugar
22.11.76	34	7.5	41	On free sale sugar
	10	5	15	On levy sugar
16.11.77	20	7.5	27.5	On free sale sugar
	7.5	5	12	On levy sugar
15.3.78	20	7.5	27.5	On free sale sugar
	6	5	11	On levy sugar
16.8.78	11.5	6	17.5	

Note: With effect from 1.3.1978 a Special Excise Duty equal to 5% of the effective Basic Duty was imposed.

The rates of excise duty on sugar currently are as follows:

Free Sale Sugar:	15.5% (Basic)
	7.5% (Additional)
	(Plus Special Excise at 5% of basic duty)
Levy Sugar:	8.5% (Basic)
	4.25% (Additional)
	(Plus Special Excise at 5% of basic duty)

Under the sugar control order, mills producing sugar are required to supply 65 per cent of their output as levy sugar and 35 per cent is sold as free sale. As of 1976-77, based on the revenue collected and the value of clearances the average effective duty on sugar worked out to Rs.53.45 per quintal.

7.8 As regards khandsari, prior to 1960, excise duty on khandsari was specific and came to about Rs. 21.50 per quintal as against Rs. 28.65 per quintal for sugar. With effect from 1.3.1960, a compounded levy scheme was introduced in respect of khandsari manufactured without the aid of sulphitation plant. From December 1, 1960 khandsari units working with the aid of sulphitation plants were also brought under the compounded levy although a differential was maintained between units working with sulphitation plants and those which did not use such plants. Further, varying rates of duty were prescribed depending upon the size of the centrifugals used in the manufacturing process. As a part of the taxation proposals for the year 1975-76, the compounded levy scheme was withdrawn from khandsari. There were protests against the withdrawal of the compounded levy scheme and it was reintroduced in April 1975 with certain modifications. With effect from January 1, 1979, khandsari was exempted from excise duty.

7.9 Excise duty on khandsari was reintroduced in October, 1979. Prior to the exemption of khandsari given in January 1979, the rates of duty on sugar worked out roughly to 17.75 per cent (weighted average of the duty on levy and non-levy sugar) and 10 per cent for khandsari. The rates of normal duty and compounded levy for khandsari for the last few years are given in Table 7.5.

Table 7.5

I. Rates of Excise Duty on Khandsari

	Tariff rate			Effective rate		
	Basic	Addl.	Total	Basic	Addl.	Total
1.3.75	15%	2.5%	17.5%	15%	2.5%	17.5%
4.2.78	15%	2.5%	17.5%	7.5%	2.5%	10%
1.3.78	15%	7.5%	22.5%	7.5%	2.5%	10%
1.1.79	15%	7.5%	22.5%	Nil	Nil	Nil
29.10.79	15%	7.5%	22.5%	7.5%	2.5%	10%

Note: With effect from 1.3.1978 a Special Excise Duty equal to 5% of the effective Basic Excise Duty was imposed in addition.

II. Compounded rates of duty on Klandsari

सत्यमेव जयते



5060 840

Sizes of Centrifugals	Weekly rates of compounded levy per centrifugals in Rupees							
	w.e.f.	w.e.f.	w.e.f.	w.e.f.	w.e.f.	w.e.f.	w.e.f.	
	30.4.74	1.3.75	30.4.75	4.2.78	1.1.79	29.10.79		
Basic+	Basic	Addl.	Basic	Addl.	Basic	Addl.		
Addl.								
(1) Height of the centrifugal not exceeding 22.9 centimetres and diameter not exceeding 45.7 centimetres.	1180	"	2020	340	506	84	Nil	
(2) Height exceeding 22.9 centimetres, but not exceeding 30.5 centimetres and diameter of and above 45.7 centimetres but not exceeding 61.0 centimetres.	1560	"	2670	450	669	111	Nil	
(3) Height exceeding 30.5 centimetres but not exceeding 45.7 centimetres and diameter of and above 61.0 centimetres but not exceeding 76.2 centimetres.	2320	"	3980	660	994	166	Nil	
(4) All other centrifugals not otherwise specified.	3040	"	5210	870	1303	217	Nil	

Note: From October 1 to October 28, 1979, the Tariff rates were applicable.

7.10 An examination of the production costs and excise burden under the two technologies presented in the Planning Commission study shows that inclusive of excise duty, ex-factory price of khandsari comes to Rs.3,738 per tonne (production cost of Rs.3,398 plus excise duty Rs.340) while that of sugar works out to Rs.3,832 per tonne (production cost of Rs.3,254 plus excise burden of Rs.578). Hence, as a result of the levy-cum-excise policy, the production cost advantage of sugar of Rs.144 per tonne (Rs.3,398 minus Rs.3,254) is converted into an ex-factory price differential of Rs.94 per tonne (Rs.3,832 minus Rs.3,738) in favour of khandsari.

7.11 With protection of this order, the cost of creating additional employment works out as follows. As indicated in Table 7.2, employment per tonne in the case of khandsari is between 39 to 43 mandays. Assuming the employment/output ratio in khandsari as 40 mandays per tonne as against 10 in sugar, additional employment generated by production of khandsari is 30 mandays per tonne. On this basis, and taking 100 days to be the normal period for seasonal employment, for providing employment for one seasonal worker, production of 3.3 tonnes of khandsari is required. Now, as noted in para 7.7, for 1976-77 the average effective rate of excise duty on sugar was about Rs.53.45 per quintal (in the Planning Commission study this is taken at Rs.57.80 per quintal on the basis of weighted average of duty on free sale and levy sugar). For khandsari, in units opting for the compounded scheme the average was Rs.26.76 per quintal. As khandsari producers mostly prefer the compounded levy scheme, the effective duty differential for khandsari may be taken at Rs.26.69 per quintal (Rs.53.45 minus Rs.26.76). The duty differential for 3.3 tonnes thus works out to Rs.880.77, which may be taken to be the cost of subsidising employment for one worker (for 100 days) in khandsari. This is only the revenue cost of employment in the khandsari sector and does not take account of the cost in terms of loss in efficiency which, as mentioned earlier, production of khandsari involves.

7.12 It may be noted that the choice of technology between sugar and khandsari is available only in respect of additional capacity. It should also be noted that to the extent this choice may affect gur production, comparative study of khandsari and gur needs to be undertaken.

MATCHES

7.13 Indigenous manufacture of matches in India was started in 1910 by a few Japanese families who had settled in Calcutta. But it could not survive the competition from imports. In 1922, the import duty was doubled to the level of Rs.1.50 per gross. Soon after, a number of small factories were established all over the country. The Swedish Match Company, Ltd., whose associates had then a near international monopoly in matches and which had been importing practically the country's entire requirements from its parent concern in Sweden set up the Western India Match Company, Ltd., (WIMCO) with factories all over India. Another company, namely, Assam Match Company was also established in 1926 with its factory at Dhubri (Assam). The claim of the match industry for protection was considered by the Tariff Board during 1926-28 and protection was granted in 1928 for an indefinite period. The import duty of Rs.1.50 per gross was converted into a protective duty. With this protection, a large number of medium sized factories manufacturing

matches mostly by manual labour came into being. A particularly large concentration grew in and around the towns of Sivakasi, Sattur and Kovilpatti in Tamil Nadu.

7.14 Excise duty was levied on matches for the first time in 1934. Upto 1948-49, match factories were classified for purposes of excise into two types, viz., factories producing not more than 100 gross boxes per day and the rest with a higher output. It was then found that such classification put the medium-sized factories at a disadvantage as they came within the higher category and had to pay duty at the full rate. With duty at this rate, they could not compete with the fully mechanised big factories. Hence, a second preferential category was introduced comprising factories whose output did not exceed 5 lakhs gross boxes per year but exceeded 100 gross boxes per day. Subsequently, representation was made to Government for enlarging the scope of preferential excise tariff for cottage match factories. Need was felt for giving encouragement to cottage/small units in view of their employment potential in rural areas. Accordingly, in 1954, a new class of factories, with production not exceeding 25 gross boxes per day, was created and a very substantial rebate in duty was allowed to them. The total number of units in 1955-56 categorised as A, B, C and D on the basis of the output was estimated by the Planning Commission at 234 (8 in 'A' Class, 103 in 'B' Class, 81 in 'C' Class and 42 in 'D' Class). The aggregate capacity was estimated at 35.3 million gross boxes of 60 sticks and the actual production that year was 34.1 million gross boxes. By a gentleman's agreement production of WIMCO was restricted to about 50 per cent of the country's total demand. As of 31.3.1978, the total number of match factories was a little over 3,300.

7.15 As of now, units producing matches are classified broadly under two categories, viz., the power-operated or mechanised units and the non-power operated ones. The non-power operated sector may be divided further into two categories viz., 'cottage' and 'other than cottage', depending on their output. Those producing not more than 75 million matches per year and recommended by KVIC or a co-operative society are categorised as 'cottage'/'tiny'. It may be noted that, broadly speaking, manufacture of matches involves the following processes:

- (i) Making of veneers,
- (ii) Making of splints,
- (iii) Dipping,
- (iv) Box making,
- (v) Box filling,
- (vi) Pasting of labels and banderolls, and
- (vii) Packing.

Except for making of veneers and splints, in manufacturing matches the use of machines is not indispensable. For the purpose of levy of central excise duty, a unit is deemed to be non-mechanised and thus eligible for concessional rates, if it does not use power in two processes, namely, dipping of splints in the composition for match heads and for filling of boxes with matches. As a result, the non-mechanised units can employ machines for (i) making boxes, (ii) filling up the frames with splints, (iii) side painting, (iv) grinding match composition, and (v) affixing labels and banderolls to the match boxes without losing the excise duty concession.

7.16 In the following table (Table 7.6) is given the production of the three sectors from 1969-70 to 1977-78. It will be noticed that the production of the mechanised sector has come down by almost 14 per cent while that of the non-mechanised middle sector has almost trebled. The production of the tiny sector has remained more or less constant.

Table 7.6

Production of Matches - Sectorwise (1969-70 to 1977-78)

('000 gross boxes)				
Year	Production			Total (of cols. 2, 3&4)
	Mechanised sector	Middle sector	Cottage sector	
1	2	3	4	5
1969-70	31,953 (51.29)	21,182 (33.99)	9,168 (14.72)	62,303 (100)
1970-71	32,552 (49.40)	26,225 (39.81)	7,106 (10.79)	65,883 (100)
1971-72	32,415 (47.79)	27,363 (40.34)	8,049 (11.87)	67,827 (100)
1972-73	29,094 (46.26)	25,331 (40.27)	8,470 (13.47)	62,895 (100)
1973-74	31,120 (44.05)	30,304 (42.90)	9,218 (13.05)	70,642 (100)
1974-75	29,541 (38.61)	29,800 (38.95)	17,167 (22.44)	76,508 (100)
1975-76	25,258 (32.37)	37,777 (48.41)	14,995 (19.22)	78,030 (100)
1976-77	27,652 (32.29)	47,683 (55.69)	10,302 (12.02)	85,637 (100)
1977-78	27,538 (28.03)	61,001 (62.08)	9,721 (9.89)	98,260 (100)

Note: Figures in brackets indicate percentage to the total

7.17 Between 1969-70 and 1978-79, the duty structure on the different sectors was as under:

	<u>Rs. per gross boxes of 50 matches each</u>
(i) Mechanised sector	4.60
(ii) Non-mechanised sector other than (iii)	4.30
(iii) Cottage Units i.e. those approved by K.V.I.C. or co-operatives	3.20

A special excise duty of 5% of the basic duty was levied in 1977-78.

7.18 Revenue forgone in order to maintain the duty differential between the three sectors in 1977-78 works out as under:

Sector	Clearances (‘000 gross)	Excise payable (Rs. lakh)		Revenue forgone (Rs. lakh)
		at conces- sional rates*	at Rs. 4.83 per gross	
Non-mechanised (middle)	59,486	2,685.81	2,873.17	187.36
Cottage	7,942	266.85	383.60	116.75
Total		2,952.66	3,256.77	304.11

* As of 1977-78

Thus, the total revenue forgone comes to Rs. 304.11 lakhs; Rs. 187.36 lakhs on account of the non-mechanised middle sector and Rs. 116.75 lakhs on account of the cottage sector.

7.19 We may now relate the revenue forgone to the additional employment created. The number of workers in the mechanised sector in 1977-78 was about 8,000. This implies one worker per 3,442.25 or say 3,500 gross boxes. As for employment in the non-mechanised sector, from available information it appears that the output per worker in the non-mechanised sector is on an average 2-3 gross boxes per day. Assuming 270 working days in a year, output per worker in this sector may be taken as 650 gross boxes per annum. The employment/output ratio in the cottage sector is not much different from that in the non-mechanised sector. We may thus take the average production per worker to be 500 gross boxes in the cottage sector. These figures are corroborated by visits made by some of the members of the Committee to match-producing units in the medium and cottage sectors at Sivakasi and adjoining areas and the discussions they had with representatives of Match Manufacturers' Associations of both medium and cottage units. We give below estimate of employment in the non-mechanised middle and cottage sectors in 1977-78 on the basis of 650 and 500 gross boxes per worker respectively and estimates of what the employment would be if the production in both these sectors were done as in the mechanised

sector at 3,500 gross boxes per worker. The difference between the two gives the estimate of additional employment created in the non-mechanised middle and cottage sectors.

Sector	Production (‘000 gross)	Estimated* employ- ment	Estimated employment at 3,500 gross per worker	Additional employ- ment created
Non-mechanised (middle)	61,001	93,846	17,429	46,417
Cottage	9,721	19,442	2,777	16,665
Total		1,13,288	20,206	93,082

*On the basis of 650 and 500 gross boxes per worker in the two sectors respectively.

Thus, additional employment of 93,082 workers is created at a revenue cost of Rs. 304.11 lakhs which comes to Rs. 327 per additional worker employed. The revenue cost per additional worker comes to Rs. 245 in the non-mechanised sector and Rs. 701 in the cottage sector.

7.20 The Budget for 1979-80 revised the duty structure on matches radically in favour of the non-mechanised and cottage sectors. The duty on the mechanised sector was raised sharply from Rs. 4.83 to Rs. 7.20 while that on the non-mechanised sector was reduced marginally from Rs. 4.52 to Rs. 4.50 and the duty on the cottage sector was reduced from Rs. 3.36 to Rs. 1.60. Assuming that the clearances of all the sectors remain the same as in 1977-78, the notional loss of revenue from the duty concessions in 1979-80 works out as under:

Table 7.7

Revenue Cost of Excise Duty Concessions in Match Industry(at 1979-80 rates)

Sector	Clearances (‘000 gross)	Excise payable (Rs. lakh)		Revenue forgone (Rs. lakhs)
		at current rates	at Rs. 7.20 per gross	
Non-mechanised	59,486	2,676.87	4,282.99	1,606.12
Tiny	7,942	127.07	571.82	444.75
Total		2,803.94	4,854.81	2,050.87

Thus, with the current rate structure, the revenue cost of additional employment works out to Rs. 2,203 per additional worker; Rs. 2,102 per additional worker in the non-mechanised sector and Rs. 2,669 in the cottage sector.

7.21 Questions which arise for consideration before us are: (i) is the duty differential between the mechanised and non-mechanised sectors justified and (ii) is there enough justification for giving a duty advantage of this order to cottage units vis-a-vis the medium ones within the non-mechanised sector? Judging by their employment potential, the non-mechanised sector evidently generates more employment than the mechanised units. Fiscal support to enable the non-mechanised units to compete with the mechanised units would therefore appear to be justified. This justification is however getting undermined because of the rather liberal terms on which the concession is given at present. As noted earlier, under the law as it stands now, a match-making unit is eligible for concessional duty on its products if only two processes (viz. dipping and box-filling) are done without the aid of power. The concession is not denied if power-operated machines are used for other processes. Enquiries revealed that some of the units in the medium category are using power-operated machines for a number of processes which are quite labour-intensive, with consequent displacement of labour. Mention may be made particularly of the process of frame-filling, that is to say, arranging splints in rectangular wooden frames for dipping in the composition for match heads. Labour displacement from the use of power in this process is as high as 10:1, in other words, use of power reduces the labour content in this process to one-tenth. Displacement of labour also takes place - though not to the same extent - in the processes of box-making and labelling. Hence, while there is justification for continuing the concession in favour of non-mechanised units, it would be desirable to make this concession conditional on the non-use of power not only in dipping and box-filling but also in the processes mentioned above.

7.22 As for the quantum of the differential between the mechanised and non-mechanised sectors, a differential of the order of Rs. 2.70 (i. e. Rs. 7.20 minus Rs. 4.50) per gross box does not seem to be called for from the cost angle. As will be seen from Table 7.6, the non-mechanised sector registered a significant growth during the years 1969-70 to 1977-78 when the duty differential was no more than 30-31 paise per gross box. A differential of Rs. 2.70 now allowed thus appears to be on the high side.

7.23 The duty advantages given to the cottage units within the non-mechanised sector which was increased in 1979 from Rs. 1.16 to Rs. 2.90 per gross box also does not seem to be justified. Employment-wise, the cottage sector does not seem to be very different from the non-mechanised medium units. One advantage of the cottage units is that they can be operated in villages without requiring the construction of regular factory sheds. Wages paid by the cottage units also seem to be a little higher. On the other hand, factories provide regular employment and better working conditions. Moreover, such a wide duty differential creates an unhealthy tendency on the part of medium units to split up, often only in name, to reap the large duty advantages. The duty advantage has been widened only last year and its impact on expansion of production in the non-mechanised (including cottage) sector, geographical dispersal and employment should be closely watched and reviewed after a year.

SOAP

7.24 The soap industry consists of a large sector and a small sector. The large sector consists of 44 units and the number has remained the same in the past two decades. In contrast, during the same period, the number of small units has nearly

doubled and now exceeds 5,000. According to the Indian Soap and Toiletries Makers' Association (ISTMA), the production of soap in 1976 was as under:

Table 7.8

Production of Soap in 1976

	<u>Laundry</u> (tonnes)	<u>Toilet</u> (tonnes)	<u>Total</u> (tonnes)
Large sector	134,000	130,000	270,000
Small sector	560,000	-	560,000
	<hr/>	<hr/>	<hr/>
Total	694,000	130,000	830,000
	<hr/>	<hr/>	<hr/>

According to official estimates, the production of soap in the small sector (excluding KVIC and other tiny units) in 1976 was 380,000 tonnes. Total production in the small sector as a whole has been put at 560,000 tonnes. The production of toilet soap in the small sector is negligible.

7.25 According to ISTMA, employment in the large sector in 1976 was 12,000 workers. Output of soap per worker in the large sector thus works out to 22.5 tonnes. Direct employment in the small sector (excluding KVIC and tiny units) has been estimated at about 38,000. This gives an average output of 10 tonnes per worker. Applying this output norm to the estimated production of 560,000 tonnes, direct employment in the small sector may be put at 56,000 workers. The same output, if produced in the large sector, would have generated employment of only 25,000 workers.

7.26 Central excise duty on soap was levied for the first time in 1954. In 1964, as a measure of relief to the non-power sector, total exemption from duty was given to units not using power or steam in soap manufacture. At present excise duty is leviable on household and laundry soap produced with the aid of power or steam at the rate of 5 per cent ad valorem. For other varieties, including toilet soap, the rate of duty is 10 or 15 per cent depending on value. Soap manufactured without the aid of power or steam is totally exempt.

7.27 According to the 1977-78 Statistical Year Book, compiled by the Directorate of Statistics and Intelligence in the Central Board of Excise and Customs, 1,372,000 quintals of household and laundry soap cleared for home consumption was subjected to excise yielding a revenue of Rs.173.56 lakhs. The average incidence of duty thus came to Rs.12.65 per quintal. As household and laundry soap manufactured in the small sector is usually priced low, we might assume that had it not been exempted it would have carried duty at the rate of Rs.9.50 per quintal. At this rate, the duty chargeable on the output of 560,000 tonnes of soap manufactured in the exempted small sector would be Rs.532.00 lakhs. This might be considered the revenue foregone in order to protect the employment in the small sector. If we relate the revenue

torgone to the additional employment created in the small sector (56,000 minus 25,000=31,000), the revenue cost of the additional employment would amount to Rs. 1,716 per worker.

7.28 It may be noted that the duty advantage given to the small sector might not by itself be adequate to protect and promote that sector. The sector has been protected from competition from the large sector mainly by the ceiling placed on the production of the laundry soap in the large sector.

7.29 All over the world, soap is made from tallow, palm oil, and coconut oil. These are natural 'hard' oils and require little pre-treatment. Recently, much R&D work has gone into upgrading of non-traditional and non-edible oils to make them suitable for soap making. These include oils from rice-bran, and seeds of neem, kusum, karanja, and sal. Besides replacing tallow which is imported and edible oils which are badly needed, the use of non-edible oils in soap making also creates large employment primarily in the collection of seeds which are mostly forest products. At present, over 80 per cent of the production of minor oils is used by the large sector in soap making. The ISTMA contend that the small sector does not have the manufacturing process, equipment, or technology to use these difficult oils to any significant extent. In view of the large employment potential of these oils, it will be advisable to explore further tax incentives to promote greater use of these oils in the small-scale sector.

7.30 Certain concessions in the form of rebate of excise duty are already allowed at specified rates if a minimum percentage of neem, karanja, kusum and sal oils are used in the manufacture of soap. Rebate is also allowed if indigenous rice bran oil or a mixture of such oil with any other oil is used in the manufacture of soap. However, because the small sector is mostly exempted from duty, it cannot have the advantage of such rebates. We have already referred to the problem of providing relief from duty paid on inputs to sectors exempt from duty on their outputs. It may be noted here that the National Commission on Agriculture estimated that 233,000 tonnes of minor oil seeds of tree origin were collected in 1970-71 providing employment for 17 million man-days which is roughly equivalent to 60,000 full-time jobs.

7.31 As already mentioned, a difficulty experienced by the small sector in using minor oils in soap-making is reported to be the lack of necessary equipment and technology. In view of this, the ISTMA has suggested that the large sector should convert minor oils into fatty acids after recovery of glycerine and supply the fatty acids to the small sector for soap making. We understand that the small sector already obtains some quantities of fatty acids through the State Trading Corporation. Some of the large units who possess the technology and equipment needed for recovery of glycerine, get mutton tallow from the STC for recovery of glycerine and return the fatty acids to the STC. For every 1,000 kgs. of tallow received from STC, these units give back 915 kgs. of fatty acids to the STC and also pay to the STC Rs.300 per 1000 kgs of tallow processed by them retaining the 70 kgs of glycerine recovered. Evidently, glycerine is a valuable product. According to ISTMA, the large soap making sector recovers at present about 10,000 tonnes of glycerine valued at Rs.17 crores. It also brings in substantial excise revenue. For instance, in 1977-78, about 11,000 tonnes of glycerine was cleared for duty yielding a revenue of about Rs.2.25 crores. Hence, it would be desirable to explore if any tax incentive could be given to encourage conversion of minor oils into fatty acids and glycerine. We

should mention here that the case was made to us primarily by the ISTMA and that we did not have an opportunity of listening to other interests. However, some of the small manufacturers contended that they are in a position to use minor oils and they are actually using a certain quantity of these oils in the manufacture of soap. They also feel that if they are allowed to use steam it might be possible for them to use larger quantity of such oils. In view of this it might be worthwhile to consider modifying the present exemption in relation to soap manufactured without the aid of power or steam in such a way as to enable the small sector to use steam without losing the benefit of the existing exemption.

LEATHER

7.32 Tanning and finishing of leather were not liable to excise duty until 1975. With the imposition of duty on goods not elsewhere specified (Tariff Item 68), tanning and finishing of leather became chargeable to excise duty. However, tanning, whether done with or without power, and finishing done without the aid of power have been specifically exempted.

7.33 The non-mechanised sector of the leather and footwear industry has always been exempt from excise duty. In 1954, for the first time, excise duty was imposed on footwear but this was restricted to units using more than 2 horse power and employing 50 or more workers. Subsequently, it was felt that loss of revenue might occur as a result of power operated units making parts for assembly into footwear by manufacturers in the exempted sector. Therefore, in 1960 duty was extended to component parts of footwear produced with the aid of power. However, all component parts except soles and heels, or soles and heels combined and made of materials other than wood or leather were exempted from duty. It was also decided that even if power was used in the production of rubber sheets, footwear parts produced out of these sheets would not attract duty if no power was used in stamping or cutting such sheets. In 1965, the levy was abolished but was reintroduced in 1967. When it was reintroduced in 1967, the small units were again exempted from excise duty subject to conditions specified above (Notification No. 93/67 C.E. of May 26, 1967). This notification came in for criticism by the Public Accounts Committee in their 177th report. The Committee observed that the bigger manufacturers took advantage of the benefit of exemption intended for small units by getting products bearing their brand name manufactured by the exempted units. An attempt was made to remove this anomaly pointed out through Notification No. 88/77 C.E. of May 9, 1977. Under this notification, the exemption was granted to a 'manufacturer' instead of a 'factory' as before, but the eligibility condition prescribed in the rescinded notification continued to be operative. In order to eliminate the possibility of avoidance of duty by the bigger manufacturers, an explanation was inserted in this notification to the effect that if a small unit manufactures footwear bearing the brand name of another manufacturer, such footwear shall be deemed to be manufactured by or on behalf of such other manufacturer. The issue of this notification was opposed by small units manufacturing footwear for and on behalf of the bigger manufacturers. It was represented that the small units would be closed down if excise duty was sought to be imposed on footwear manufactured by them for bigger units. Since the small units did not have any marketing facility of their own and depended solely on the big manufacturers for marketing their product, Government finally amended this notification (vide Notification No. 269/77 C.E. of 9.8.77) modifying the explanation mentioned earlier to the effect that affixing of brand names of other manufacturers shall not amount to manufacture by or on behalf of such other manufacturer or trader.

7.34 From the above, it will be seen that the structure of excise duties on leather and footwear industry has been so designed as to provide complete exemption for the non-power using sector. In the case of footwear, exemption has been granted to producers who do not use power to any significant extent (i.e. not more than 2 H.P.) or do not employ more than 49 workers. It may be added that footwear of not more than Rs. 15 per pair is also exempt from duty. Footwear made of PVC or other plastic material is also exempt from duty.

7.35 It is estimated that at present the production of leather footwear is around 230 million pairs, the bulk of which is in the tax exempt sector. In the absence of reliable data on production and employment in the taxed and tax-exempt sectors, it is difficult to judge the revenue cost of protecting employment in the tax-exempt sector. It is to be noted that all future expansion of production of footwear is reserved for the cottage sector.

7.36 While production and employment in the non-mechanised sectors of the leather, footwear and leather-finishing industries have thus been protected from competition of the mechanised sectors, there is no such protection for non-mechanised tanning industry as the mechanised and non-mechanised sectors of tanning industry are treated alike inasmuch as both are exempt from excise duty. It was represented that in the absence of such protection, employment in the non-mechanised sector of tanning industry is likely to be adversely affected by growing mechanisation in that industry. Non-mechanised tanning at present provides employment to some of the most socially handicapped sections of the society and judging by the 1961 and 1971 population censuses, employment in this industry has been declining. The matter needs urgent and careful consideration.

AGRICULTURAL MECHANISATION

7.37 Power-driven agricultural machinery manufactured in the country are subject to excise duty of 8 per cent ad valorem¹. Agricultural implements and machinery are exempted from customs duty in excess of 40 per cent. They are also exempted from auxiliary duty but are subject to a countervailing duty. Tractors of Draw Bar Horse Power (DBHP) 12 and below are completely exempt from excise duty. Tractors of more than 12 DBHP (but not more than 50 DBHP) fully built in the country are subject to excise duty at 10.5 per cent (basic duty of 10 per cent plus 5 per cent surcharge on basic duty). However, if we add up the several duties and taxes which a tractor and its components pay, according to a note given to us by the Economic and Statistical Adviser, Ministry of Agriculture and Irrigation, the total comes to 32.5 per cent. The details are as under:

	<u>Ad valorem</u>
Excise duty	10.5%
Custom and Excise duties, Sales tax, and Octroi on raw materials and components (average)	10.0%
Central Sales Tax	4.0%
State Sales Tax (average)	7.0%
Octroi and miscellaneous	1.0%
Total	<u>32.5%</u>

1. Power tillers are exempt from duty.

7.38 The impact of mechanisation in agriculture on employment is currently being examined by a Committee set up by the Planning Commission. But a recent study done at the instance of the Project Appraisal Division of the Planning Commission by the Agro-Economic Centre, University of Delhi provides evidence of adverse effects of harvester-combines on employment which appears conclusive.¹ The study is based on a sample of 179 farmers selected from the districts of Ludhiana (Punjab), Karnal (Haryana), and Ganganagar (Rajasthan). The data relate to Rabi crop of 1977-78 and the following Kharif crop. Of the 179 farmers selected for the study, 52 used harvester-combines for wheat, 25 for paddy, and 39 for wheat and paddy both. The remaining 63 farmers did not use harvester-combines. However, all of them use mechanical threshers for wheat; threshing of paddy was done manually.

7.39 There is no evidence of any impact of the harvester-combines on cropping intensity or farm-productivity. But their impact on employment is very large. The study shows that the average labour used for harvesting and threshing of wheat was 9.29 man-days per acre where harvester combines are not used, while use of harvester-combines reduced this figure to 0.50 mandays. Thus the use of harvester-combines displaced 8.79 man-days per acre of wheat which is 95 per cent of harvesting and threshing labour. In the case of paddy, the corresponding figures were 18.39 and 0.85 man-day per acre respectively. Thus, the harvester-combines displaced 17.54 man-days per acre of paddy which again is 95 per cent of harvesting and threshing labour.

7.40 The estimated expenditure per acre for harvesting and threshing in the two cases is as under;

	With harvester-combines (Rs)	Without harvester-combines (Rs)
<u>Wheat</u>		
Labour	6.20	121.17
Equipment	157.59	57.34
Miscellaneous	2.18	-
Total	165.97	178.51
<u>Paddy</u>		
Labour	8.75	191.35
Equipment	192.28	-
Miscellaneous	3.23	0.47
Total	204.26	191.82

Equipment charges in the case of harvester-combines are the hire charges since they were mostly hired. In the case of mechanical threshers for wheat, the

1. Research Study No. 79/3, Agro-economic Centre, University of Delhi.

equipment charges are actuals including depreciation at 12.5 per cent by straight line method and 12.5 per cent on average value of the thresher. Miscellaneous expenses in the case of harvester-combines comprise tipping and food for drivers, etc. In the case of manual threshing of paddy, miscellaneous expenses comprise cost of transporting harvested crop to the threshing floor.

7.41 It will be seen that the cost advantage of the harvester-combines is marginal in the case of wheat - Rs. 12.54 per acre - and negative in the case of paddy. Nevertheless, it almost wholly displaces harvesting and threshing labour. There is therefore little justification for its use. Probably some increase in the excise/import duties may help to keep the harvester-combines out; if not, it will be advisable to ban their imports altogether.

7.42 We emphasise once again that we have not been able to verify the accuracy of the data given in these several studies and that therefore our observations on them are necessarily tentative and indicative. Our intention in presenting these studies, nevertheless, is to illustrate the kind of studies that will have to be frequently undertaken in order to monitor the impact of tax concessions and exemptions on employment and to judge the appropriateness or otherwise of such concessions.



CHAPTER VIII

SUMMARY AND RECOMMENDATIONS

8.1 The employment potential of the village and small industries has been recognised beginning with the First Five Year Plan and strategies and programmes have been designed for the full exploitation of this potential which, in spite of rather unsatisfactory performance, have been continued from Plan to Plan right into the Revised Draft Sixth Five Year Plan 1978-83. Differential excise taxation has been recognised as an important instrument of policy to promote labour-intensive production though sufficient attention has not been paid to rationalise its structure. Provisions in direct taxation have also not been examined specifically from the point of view of their effect on employment. These constitute our main terms of reference. Other instruments of the policy to promote labour-intensive production have been physical regulation and direction of production and provision of necessary infrastructure for the supply of raw materials, credit, and technical assistance to the village and small industries and for marketing their output. Though these components are not specifically covered by our terms of reference, we wish to emphasise their importance. In the absence of such supporting infrastructure, tax incentives and disincentives by themselves will be not only not fully effective but their benefits and advantages may go to unintended quarters. (2.21)

8.2 Our terms of reference require us (i) to identify provisions in Central tax laws which have an influence on employment, (ii) to examine their impact on employment and techniques of production, and (iii) to suggest appropriate changes in Central tax laws so as to promote employment and adoption of labour-intensive methods of production. First, we deal with direct taxes. (3.1)

8.3 Since employment depends, among other factors, on the level of investment in the economy, it has been argued that an essential condition for growth of output and employment is to reduce the burden of taxation. This is clearly a debatable proposition. It also raises questions of the relative roles of public and private investment and the extent to which the country should depend upon private investment on its own terms. These are essentially political issues and, in our opinion, they are beyond the scope of an expert committee such as ours. Therefore, we have kept the question of level of taxation out of our consideration and confined our attention to those provisions in the tax system which are likely to influence decisions regarding choice of technology and scale of production. The most notable of such provisions in the Central direct tax laws are: (i) investment allowance for new plant and machinery, and (ii) tax holiday for new industrial undertakings. (3.2)

8.4 A tax concession linked to the value of plant and machinery has a prima facie bias in favour of capital-intensive technology. Given the rising costs, direct and indirect, of employing labour, the preference for mechanisation is already strong. Even if fiscal measures may not succeed fully in neutralising the preference for capital-intensive technology, it would be inadvisable to strengthen these biases further. We therefore recommend that the investment allowance be discontinued. (4.7 - 4.8)

8.5 The existing provisions for tax holiday, because they are not linked directly to investment in plant and machinery, may not have a capital-bias as acute as the

investment allowance has. Nevertheless, because they are linked to capital employed, they also induce a certain capital-bias. Hence, we recommend that the tax holiday provisions should be delinked from capital employed and that, instead, an appropriate fraction of the profits of a new industrial undertaking should be given tax exemption during the period of tax holiday. As there will be no provision to carry forward any deficiency, we recommend that the tax holiday may be extended to seven years instead of five years as at present in the case of companies and to ten years instead of seven in the case of co-operatives. The separate provisions for tax holiday for new industrial undertakings set up in backward and rural areas (sections 80 HH and 80 HHA) may be merged in the provisions for tax holiday by prescribing a higher percentage of profits of such undertakings for tax exemption during the period of tax holiday. (4.10 — 4.13)

8.6 The present provisions for tax holiday permit an existing concern setting up a new unit to set off losses in the new unit against the profits of the old units thereby reducing its tax liability immediately and claim tax holiday for the entire profits of the new unit in later years within the holiday period. This confers an unintended benefit in favour of existing concerns compared to new ones. In order to eliminate such differential advantage to existing concerns, we recommend that a clear option should be given to assessees setting up new units whereby one may avail of the benefit of tax holiday provided that the unabsorbed depreciation and losses of the new unit are carried forward and set off only against the profits of the new unit. In the alternative, it should be open to an assessee to set off/carry forward the unabsorbed depreciation and losses of a new unit against the profits of its existing units but in that case the benefit of tax holiday should not be available. (4.14)

8.7 The tax holiday is at present granted to new industrial undertakings manufacturing products which do not fall within the non-priority items listed in the Eleventh Schedule to the Income-tax Act. It seems to us that, with the multiplicity of policy objectives, it is not easy to draw such a schedule and the schedule often becomes arbitrary. We, therefore, recommend that a tax holiday in the form recommended above should be available to all new industrial undertakings irrespective of the products they manufacture. Where the manufacture of a product or its domestic use is to be discouraged, it would be desirable to rely on other instruments like licensing and excise taxation. (4.15, 4.16)

8.8 The Central scheme of investment subsidy for backward areas introduced in 1971, linked as it is to fixed capital invested, may also appear to have a capital bias. Nevertheless, considering its primary object, namely, growth of industries in backward areas, we do not suggest any change in its formulation. (4.17)

8.9 Recent provisions permitting carry forward and set off of accumulated losses and unabsorbed depreciation of a sick industrial unit in the hands of a company taking over the former under an approved scheme of merger (section 72A) are intended to help revive and revitalise sick units and thereby utilise their fixed capital and protect employment in them. But there appears to be no adequate safeguards to ensure that the employment is in fact protected. We recommend that the concession under section 72A of the Income-tax Act should carry an obligation on the part of the company taking over a sick unit to ensure employment according to the provisions of the merger scheme for a period of at least five years from the year in which the merger takes place. Failure to honour the obligation should entail proportionate withdrawal of the concession through a recapture provision in the Income-tax Act. (4.18)

8.10 Exemption of the Khadi and Village Industries Commission and co-operatives of certain categories from income-taxation is intended to help the growth of tiny and cottage sectors which are in general labour-intensive in production. There are no reliable data regarding the cost of such exemptions and the benefits flowing from them. Consequently, no evaluation of these exemptions is possible.(4.19)

8.11 We have considered suggestions to discourage excessive use of capital by levying a tax on plant and machinery. We do not think this is advisable as higher cost of capital may divert investment in directions relatively more profitable but of lower social priority and may also affect the small sector more adversely than the large sector. (4.20)

8.12 We have also considered a suggestion for differential taxation of profits arising from capital-intensive and labour-intensive technologies. We think that this would be administratively too complicated. Differential taxation of different technologies may be administratively simpler and easier by discriminatory indirect taxation. (4.21)

8.13 A measure to encourage employment of labour is a wage-subsidy which of course would be equivalent to a negative direct tax. We have carefully considered several alternatives. It seems to us that their revenue costs may become excessive and their employment benefits may turn out to be small and doubtful. We do not think that direct wage-subsidies will be practicable.(4.22, 4.28)

8.14 Nevertheless, we recommend a limited use of wage-subsidy to protect and promote employment of women. One reason underlying the reluctance of employers to employ women is the additional cost entailed by maternity leave salaries and provision of creches for children, etc. To neutralise partly the extra cost of employing women, we recommend that (i) a weighted deduction of 150 per cent of the leave salary paid to women workers in respect of maternity leave (restricted to two occasions) should be allowed in the computation of business income of employers, and (ii) the initial depreciation on the cost of building creches, schools, and maternity homes should be raised from the existing 40 per cent to 50 per cent. (4.29)

8.15 The indirect taxes levied by the Central Government consist mainly of excise and customs duties. In view of the problem of massive unemployment in the country, differential excise taxation of the mechanised and non-mechanised sectors as well as of the organised and decentralised sectors has been used to influence technological choices and thereby protect and promote employment. The main focus of the exemptions and concessions provided in excise duty has been to protect and encourage the growth of non-mechanised and small units vis-a-vis those in the organized sector. (5.1)

8.16 While the non-mechanised and small units are given wide ranging exemptions and concessions in Central Excise, the units not paying excise duty on their products cannot naturally obtain any relief in respect of duty paid on their inputs. This may neutralise to some extent the duty advantage given to them. On a careful consideration, it seems to us that, in a majority of cases, there is ample justification for continuing the taxation of inputs. Hence, cases where such relief is justified will have to be identified after a detailed examination of each case. (5.19, 5.20)

8.17 Where justified, such relief may be given either by exempting the specified inputs or by extending the facility of receiving dutiable goods from their manufacturers under bond subject to necessary licence and prescribed procedures. Where small units buy their inputs from the open market, and not directly from the manufacturers, similar relief may be provided by giving credit on a notional basis for duty paid on excisable inputs purchased from the market. (5.21, 5.22)

8.18 One consequence of the preferential treatment of the small scale sector in the matter of excise duties has been the practice of farming out of production by large producers. Though this helps promote greater employment, the margin of profit realised by the large producers by marketing under their brand names appears in some cases to be disproportionately high. Nevertheless, because of the dependence of the small producers on the marketing organization of the large producers, it may not be advisable to levy excise duty on such products of the small producers when marketed by the large producers. (5.23, 5.24)

8.19 Besides protecting and promoting non-mechanised and small units in different industries and thereby promote greater employment, excise duty exemptions and concessions may be used for promoting greater employment in specific processes, such as material handling and packaging of final product. We recommend that such processes should be identified industry by industry and appropriate rebate on excise duty leviable on their products should be allowed. (5.25)

8.20 An important element in the structure of indirect taxation is the customs duties. Particular reference may be made to the duties on capital goods which are generally levied at the rate of 40 per cent *ad valorem*. To the extent plant and machinery imported from abroad are capital-intensive, high rates of import duty on capital goods serve to discourage excessive capital-intensive technology. On the other hand, high import duties on capital goods may be detrimental to growth of production in the country. Hence, it may be desirable to scale them down in certain cases. We agree with the recommendation made by the Jha Committee that scaling down of these duties should be both selective and phased. (5.26, 5.27)

8.21 Besides the differential excise duties which the products of small-scale and labour-intensive technologies enjoy, sometimes direct assistance is given in the form of rebates on sale of their products and loans at subsidised rates. The policy has been in operation ever since the First Five Year Plan and in view of the difficult employment situation will have to continue for quite some time. It is therefore necessary to evolve norms and guidelines to judge the propriety and adequacy of a given level of assistance to a given technology. The following appear to us to be some of the relevant considerations (5.28)

8.22 It is generally recognized that enhancing employment by adoption of labour-intensive technology can only be a temporary and transitional solution to the problem of unemployment; that to the extent that it has to be supported by fiscal means it involves public cost and hence that the productive contribution of the employment must be sufficient to reduce substantially the burden of relief. But, beyond these general principles, there has been little concretisation and quantification of the several concepts involved. (5.29)

8.23 The problem of viability of a labour-intensive technology arises from the fact that the value added per worker with such technology is very low so that it can offer only a low reward to the owner-operator, a low return on the capital, and a low wage to the wage-earner. When these are so low as to be unacceptable, the technology becomes non-viable. (5.30, 5.34)

8.24 Besides the low value added by them per worker, the labour-intensive technologies, being unorganized, also suffer from a number of other handicaps such as higher prices of raw materials, higher interest rates on loans, and lower prices for their products. The rationale of duty differentials is to place a handicap on the less labour-intensive technologies so that the more labour-intensive technologies, in spite of their several handicaps, may survive the competition. (5.35)

8.25 As duty differentials do not involve any direct payments to any sector, they do not entail any explicit public cost. But there is an implicit public cost, an appropriate measure of which is the net additional revenue which could be collected if the entire production had taken place in the full duty-paying sector. Though it is essentially a hypothetical measure, without some such measure, it would be difficult to assess the propriety and adequacy of a given duty differential. (5.36, 5.38)

8.26 Given a cost, its justification is to be judged by an assessment of the benefits flowing from it. The purpose of duty differentials is to protect the disadvantaged sector from competition and thus to protect the employment in it. Employment protected may be measured by two criteria. One is the number of workers employed. A large part of employment in labour-intensive industries is part-time. For a proper assessment of the quantum of employment protected, this must be converted into equivalent full-time employment. Moreover, it should be recognised that the less labour-intensive technology also provides some employment. Hence, the cost should be related, not to total employment in the labour-intensive sector, but to the additional employment that sector provides over and above the employment that the less labour-intensive sector would provide if the same output was produced in that sector. One could then work out the per worker cost of protecting such additional employment. (5.39)

8.27 The other criterion is the level of wages at which the employment is protected. If we relate the cost to the total wage bill, that would indicate the extent to which the present wages were being protected or 'subsidised'. This presumes that the entire duty advantage is utilised to pay the workers a higher wage. This may not be true in most cases; much of the duty advantage might go to compensate the other handicaps of the sector such as high prices of raw materials, high rates of interest on loans, and low prices for their products. In the circumstances, it would be wrong to interpret the entire duty advantage as a 'wage-subsidy'. To estimate the element of wage-subsidy, if any, one should find the productive contribution of labour, that is to say, the wages that the industry could pay and remain competitive with no duty advantage as also no handicaps other than low-productivity technology. The difference between the actual wage and such productive contribution, would indicate the element of wage-subsidy present. The balance of duty advantage and other direct assistance goes to the exploitative elements in the system. This happens because there has been no co-ordinated management of fiscal concessions on the one hand and development of institutional support on the other, to this sector. (5.40)

8.28 The costs and benefits of prevailing differential excise duties and direct assistance through sale rebates and interest subsidies given to labour-intensive sector have not been systematically examined along these lines. Unfortunately, relevant data are also wanting. We would like to underscore the paucity of even basic information relevant for decision-making in the first instance and its evaluation subsequently. (5.41)

8.29 In Chapter VI we have examined the case of cotton textile industry in which the labour-intensive technology has an employment potential next only to that in agriculture. In Chapter VII, we have presented cases of a few other industries where apparently a choice of technology exists. They are: (i) sugar, (ii) match, (iii) soap, (iv) leather, and (v) mechanised agriculture. We should emphasise that we have gathered the data rather hurriedly and that it has not been possible for us, in all cases, to check the accuracy and reliability of these data. Our purpose in presenting them, nevertheless, is to indicate and illustrate the nature of monitoring that will be needed, case by case, before the data and analysis that will be needed for judging the propriety and adequacy of given duty concessions and direct subsidies from time to time.

8.30 Experience shows that duty differentials and direct assistance by themselves are not adequate to protect the labour-intensive technology from competition of the capital-intensive sector and that therefore a more positive policy of reservation of spheres of production is needed. We have not been able to examine the related question in depth. But several points emerged during our deliberations which we wish to place on record briefly. First, reservation is easy to administer if done by raw materials rather than by product. For instance, the entire silk could be reserved for weaving on handloom. Second, when an entire sphere of production is reserved for labour-intensive production, protection by duty differentials and direct fiscal assistance becomes irrelevant. The product should carry a duty which the consumer can bear. For instance, if silk is reserved for handlooms, there is no reason to exempt either silk or silk textiles from excise duty. The present exemptions of such items constitute at least in part a subsidy to the rich consumer. Finally, it should be recognised that the burden of protecting low productivity employment ultimately falls on the consumer of the product. Hence, items of elite and rich consumption should be identified for reservation for labour-intensive production.

8.31 Before concluding, we wish to emphasise once again that it is mostly the traditional village and cottage industries which use labour-intensive technology. These industries being unorganised are at present in the clutches of merchant capital. Unless this is replaced by a non-exploitative institutional infrastructure, the policy to protect and promote employment in these industries, while it protects and promotes low productivity and low paid employment, also helps perpetuate exploitation by merchant capital through the trader-money-lender

nexus it creates. This is a pre-capitalist form of exploitation and less amenable to regulation and control than is the capitalist form of exploitation.

V. M. Dandekar
Chairman

A. Vaidyanathan
Member

Anand P. Gupta
Member

L. C. Jain
Member

K. Narasimhan
Member

I. P. Gupta
Member

A. Bagchi
Member-Secretary



New Delhi
January 30, 1980

NOTE OF DISSENT BY DR. ANAND P. GUPTA

I feel constrained to differ from my distinguished colleagues in their view that the question of level of taxation is beyond the scope of the Committee (para 3.2) Having recognised that, among other factors, employment depends on the level of investment in the economy, the Committee in my view is left with no alternative but also to deal with the question of the overall impact of the present level of income taxation in the country.

As I see the things, there is a strong case of a reduction in the rates of corporation tax in the case of 'industrial' companies. Lower rates of corporation tax in the case of such companies can be expected to have beneficial effects not only on the climate for investment but also on that for output. And this, in turn, will be reflected in higher levels of employment.

Neither will there be any significant net loss of revenue if the rate of corporation tax in the case of 'industrial' companies is brought down from the present level of 59.125 per cent to, say, 50 per cent. Withdrawal of the scheme of investment allowance alone will save the exchequer a sum which will take care of a good part of the revenue loss which may result from reducing the rate of corporation tax to 50 per cent. The exchequer would also stand to benefit on account of the decrease in business-financed conspicuous consumption expenditure which can be expected to take place as a direct result of the reduction in the nominal rates of corporation tax. As the things stand today, it is the exchequer which ends up paying for a good part of the conspicuous consumption expenditure which one sees around. With a noticeable reduction in the nominal rates of corporation tax, one can certainly expect at least some decrease in such expenditure.

Some people may argue that a reduction in tax rates would encourage companies to distribute larger dividends. I do not see anything wrong with an outcome such as this. Indeed, I believe the economy would be healthier if companies distribute not less but more of their incomes and if the additional money paid in dividends is mobilised through a dynamic capital market.

Anand P. Gupta
Member

New Delhi
January 30, 1980